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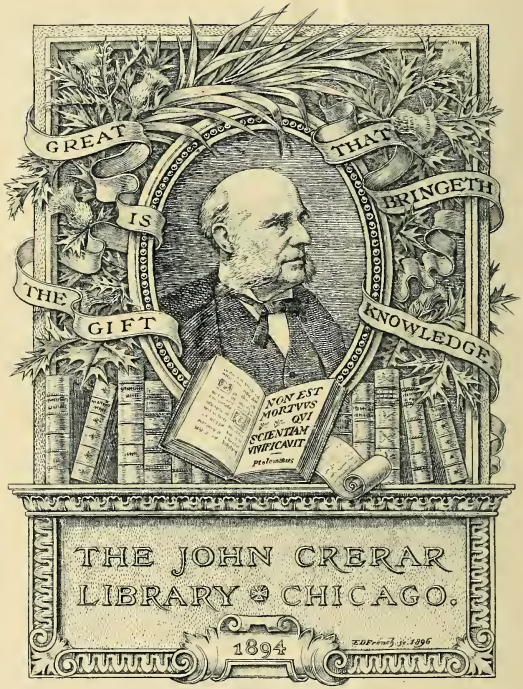
The George Washington University

Catalogue, 1907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VOL. VI No. 1

The George Washington University Bulletin

MARCH, 1907

CATALOGUE NUMBER

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PART I.

THE UNIVERSITY.

1907.

JANUARY.

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The George Washington University.

UNIVERSITY CALENDAR.

1907.

January 1, *Tuesday.*—Last day on which Theses may be presented for Graduation at the Winter Convocation.

January 31, *Thursday.*—Mid-Year Examinations completed in the Department of Arts and Sciences.

February 1, *Friday.*—Second Term begins.

February 1, *Friday.*—Annual Meeting of the Alumni Association.

February 4, *Monday.*—Doctorate Disputation.

February 22, *Friday.*—Winter Convocation.

March 29-April 1, *Friday* to *Monday,* both inclusive.—Easter holidays.

April 3, *Wednesday.*—Davis Prize Speaking.

May 1, *Wednesday.*—Last day on which Theses may be presented.

May 15, *Wednesday.*—Examinations for Degrees completed.

May 27, *Monday.*—Doctorate Disputation.

May 28, 29, 31, June 1, *Tuesday, Wednesday, Friday,* and *Saturday.*—Examinations for admission.

June 2, *Sunday.*—Baccalaureate Sermon.

June 5, *Wednesday.*—University Commencement.

SUMMER VACATION.

September 18, *Wednesday.*—Fall examinations in the Department of Medicine.

September 16-20, *Monday* to *Friday.*—Examinations for admission.

September 25, *Wednesday.*—Academic Year begins in all Departments of the University.

October 16, *Wednesday.*—Fall Convocation.

November 28-30, *Thursday* to *Saturday,* both inclusive.—Thanksgiving recess.

RECESS FROM DECEMBER 23, 1907, TO JANUARY 2, 1908, BOTH INCLUSIVE.

1908.

January 31, *Friday.*—Mid-Year Examinations completed in the Department of Arts and Sciences.

February 1, *Saturday.*—Second Term begins.

February 3, *Monday.*—Doctorate Disputation.

1908.

February 22, *Saturday.*—Winter Convocation.
February 22, *Saturday.*—Annual Meeting of the Alumni Association.
April 17-20, *Friday* to *Monday*, both inclusive.—Easter holidays.
April 22, *Wednesday.*—Davis Prize Speaking.
May 1, *Friday.*—Last day on which Theses may be presented.
May 13, *Wednesday.*—Examinations for Degrees completed.
May 25, *Monday.*—Doctorate Disputation.
May 26, 27, 28, 29, *Tuesday* to *Friday.*—Examinations for admission.
May 31, *Sunday.*—Baccalaureate Sermon.
June 3, *Wednesday.*—University Commencement.

CHRONOLOGICAL TABLE.

1799. George Washington's last will and testament, urging the establishment of a University in Washington.
1821. Charter granted by Act of Congress creating "The Columbian College in the District of Columbia."
1825. The Medical School organized.
1865. The Law School organized.
1866. Mr. W. W. Corcoran gave the Medical School a building, 1325 H street.
1872. Mr. Corcoran gave an endowment "to make the College an University."
1873. Act of Congress changing the name to the Columbian University.
1884. University building, Fifteenth and H streets, occupied by various departments of the University.
1884. The Corcoran Scientific School organized.
1887. The Dental School organized.
1893. The School of Graduate Studies organized.
1898. The Department of Jurisprudence and Diplomacy organized.
1898. Incorporation of the George Washington Memorial Association.
1902. Merging of the College, the Corcoran Scientific School, and the School of Graduate Studies into one Department of Arts and Sciences.
1903. Conferences between representatives of the Washington Memorial Institution, the George Washington Memorial Association, and the Columbian University with a view to coöperation in graduate work.
1904. January 23. Act of Congress making the University non-sectarian and giving the Board of Trustees power to change the name.
1904. Suggestion of the George Washington Memorial Association that Columbian University change its name to The George Washington University, and its offer to erect a memorial building on the new site, at a cost of $500,000, for graduate study and scientific research, accepted by the Board of Trustees.
1904. September 1. Change of name to The George Washington University.
1905. February 22. First Winter Convocation of The George Washington University.
1905. Act of Congress authorizing the incorporation of colleges under the University charter.
1905. Organization under the University charter of the Columbian College, the Washington College of Engineering, and the National College of Pharmacy.
1907. Organization of the College of the Political Sciences.
1907. Organization of the Division of Education.

SOME IMPORTANT PROVISIONS IN THE CHARTER.

Degrees.—The Board of Trustees may confer "such degrees in the liberal arts and sciences to such pupils of the institution or others whom by their proficiency in learning or their meritorious distinction they shall think entitled to them, as are usually granted and conferred * * * and to grant to such graduates diplomas or certificates under the common seal * * * to authenticate and perpetuate the memory of such graduation."

(Act of Congress, 1821.)

A Board of Trustees, "consisting of twenty-two members. The President of the University shall be *ex-officio* a member of said Board, and the remaining twenty-one shall be diveded in three classes with seven members in each class," the term of service being three years.

(Act of Congress, 1898.)

"The George Washington University shall have, and is hereby given, power to increase the number of its Trustees from time to time by two-thirds vote of the whole number of the Trustees at the time such vote is taken, to a number not exceeding forty-five."

(Act of Congress, 1905.)

Property and Endowment.—"Shall be competent and capable at law and in equity to take * * * any estate, in any messuage, lands, tenements, hereditaments, goods, chattels, moneys, and other effects, by gift, grant, bargain, sale, conveyance, assurance, will, devise, or bequest, of any person or persons whatsoever, * * * and the same to grant, bargain, or sell, convey, assure, demise, and to farm let, and place out on interest for the use of said College, in such manner as to them shall seem most beneficial to the institution, and to receive the rents, issues and profits, income and interest of the same and to apply the same to the proper use and benefit of the said College."

(Act of Congress, 1821.)

"That power is hereby given the Board of Trustees * * * to change the name of said University, * * * and thereupon the University shall be known and designated by the name adopted, and by said new name the said University shall be vested with and convey its real estate, hold, control, and administer endowments and gifts of money and property heretofore and hereafter made for the maintenance of its educational work and do and perform all acts which it now has the power to do under its said charter. Such change of name shall not in any other way change, affect, or modify in any degree the rights, privileges, obligations, and powers of the said University under the charter of February ninth, eighteen hundred and twenty-one, and the amendatory acts thereto."

(Act of Congress, 1904.)

Non-sectarian.—"That persons of every religious denomination shall be capable of being elected Trustees; nor shall any person, either as president, professor, tutor, or pupil, be refused admittance into said University, or denied any of the privileges, immunities, or advantages thereof, for or on account of his sentiments in matters of religion."

(Act of Congress, 1904.)

Power to Organize Colleges.—"That by and with the consent of the said University, colleges may be organized hereunder for the purpose of carrying on, in connection with the University, special lines of educational work in the arts, sciences, and liberal and technical knowledge, such colleges to be educationally a part of the system of the University, but upon independent financial foundations, and to this end any five or more persons desirous of associating themselves for the purpose of establishing a college hereunder may make, sign, and acknowledge before any officer authorized to take acknowledgment of deeds in the District of Columbia, and with the assent of the University in writing, file in the office of the Recorder of Deeds of the said District a certificate in writing, in which shall be stated: * * * Upon filing such certificate the Trustees named therein and their successors shall be a body politic, incorporated by the name and style stated in the certificate, and by that name and style shall have perpetual succession in association with the University, with power in the college to sue and be sued; plead and be impleaded; to acquire, hold, and convey property in all legal ways; to receive by gift, devise, or otherwise, and hold, control, and administer endowments and gifts of money and property thereafter made to it for the maintenance of its educational work; * * * but said college shall not confer academic or honorary degrees; such college shall hold the property of the institution and all moneys and property conveyed to it by purchase, gift, conveyance, will, devise, or bequest solely for the purpose of the educational work specified in said certificate."

(Act of Congress, 1905.)

Affiliated Colleges.—"That said University may enter into affiliated agreements with any institutions of learning outside of the District of Columbia, for the purpose of giving to students of such institutions the educational facilities of said University, and the departments of the Government in the city of Washington which are by law open to students, upon such terms as are mutually agreed upon by the said University and the affiliated institutions."

(Act of Congress, 1905.)

Boards of Visitors.—"Said Board may also appoint a board or boards of visitors for any department or departments of educational work carried on by the University, such boards of visitors to be advisory only."

(Act of Congress, 1905.)

BOARD OF TRUSTEES.

CHARLES WILLIS NEEDHAM, LL.D.,
President of the University and *ex-officio* Member of the Board.

1907.

SAMUEL H. GREENE, D.D., LL.D. — WILLIAM F. MATTINGLY, LL.D.
SAMUEL W. WOODWARD. — EUGENE LEVERING.
EDWARD M. GALLAUDET, LL.D. — HENRY C. YARROW, M.D.
JOHN JOY EDSON, LL.B.

1908.

HENRY KIRKE PORTER, LL.D. — WAYNE MACVEAGH, LL.D.
JOHN B. LARNER, LL.D. — FRANCIS G. NEWLANDS, LL.D.
JACOB H. GALLINGER, A.M. — HENRY B. F. MACFARLAND.
ALEXANDER GRAHAM BELL, LL.D.

1909.

THEODORE W. NOYES, LL.M. — DAVID ABBOT CHAMBERS, A.M.
ANDREW J. MONTAGUE, LL.D. — CHARLES D. WALCOTT, LL.D.
WILLIAM S. SHALLENBERGER, A.M. — CHARLES W. RICHARDSON, M.D.
FRANK C. HENRY, Phar.D.

OFFICERS OF THE BOARD.

WAYNE MACVEAGH, LL.D., Chairman. — JOHN B. LARNER, LL.D., Secretary.
EDWARD M. GALLAUDET, LL.D., Vice-Chairman. — CHARLES WENDELL HOLMES, Treasurer.
WILLIAM AUGUSTIN DE CAINDRY, Auditor.

The term of trustees expires, in each case, on Commencement Day of the year indicated.

STANDING COMMITTEES OF THE BOARD OF TRUSTEES.
1906-1907.

Executive: WOODWARD, GREENE, MATTINGLY, LARNER, GALLAUDET, EDSON, WALCOTT, NEEDHAM.

Nominations: GREENE, WOODWARD, PORTER, GALLINGER, BELL.

Department of Arts and Sciences: NOYES, GALLAUDET, MACFARLAND.

Faculty of Medicine and Hospital: RICHARDSON, LARNER, EDSON, YARROW.

Faculty of Dentistry: SHALLENBERGER, RICHARDSON, GALLINGER.

Department of Law: MATTINGLY, LARNER, MONTAGUE.

College of the Political Sciences: MACVEAGH, MATTINGLY, NEWLANDS, MACFARLAND.

Auditing Committee: CHAMBERS, HENRY, SHALLENBERGER.

Endowment: GALLAUDET, LEVERING, WOODWARD, GREENE, MACVEAGH, HENRY, NOYES, BELL, NEWLANDS, CHAMBERS, PORTER, GALLINGER, MACFARLAND.

COLLEGES OF THE UNIVERSITY.

Columbian College.

President of the University, *ex-officio* Member of the Board.

1906.

THOMAS R. JONES, DAVID A. CHAMBERS, A.M.,
THEODORE W. NOYES, LL.M.

1907.

EUGENE LEVERING, EDWARD M. GALLAUDET, LL.D.,
JOHN B. LARNER, LL.D.

1908.

SAMUEL H. GREENE, D.D., LL.D., SAMUEL W. WOODWARD,
WILLIAM S. SHALLENBERGER, A.M.

OFFICERS OF THE BOARD.

SAMUEL H. GREENE, D.D., LL.D., Chairman.
EDWARD M. GALLAUDET, LL.D., Vice-Chairman.
JOHN B. LARNER, LL.D., Secretary.
JOHN JOY EDSON, LL.B., Treasurer.

Washington College of Engineering.

President of the University, *ex-officio* Member of the Board.

1906.

JOHN B. LARNER, LL.D., FREDERICK H. NEWELL, B.S.,
SAMUEL W. STRATTON, Ph.D.

1907.

THOMAS M. CHATARD, Ph.D., OTTO H. TITTMANN,
T. CUMMERFORD MARTIN.

1908.

BERNARD R. GREEN, CHARLES W. RAE, C.E.

OFFICERS OF THE BOARD.

BERNARD R. GREEN, Chairman. JOHN B. LARNER, Secretary.
JOHN JOY EDSON, Treasurer.

National College of Pharmacy.

President of the University, *ex-officio* Member of the Board.

G. G. C. SIMMS, Phar.D. FRANK C. HENRY, Phar.D.
SAMUEL I. HILTON, Phar.D. H. E. KALUSOWSKI, M.D., Phar.D.
FRANK P. WELLER, Phar.D. WALTER G. DUCKETT, Phar.D.
SAMUEL WAGGAMAN, M.D., Phar.D. W. H. BRADBURY, Phar.D.
CHARLES B. CAMPBELL, M.D., Phar. D. LEWIS FLEMER, Phar.D.
HERBERT C. EASTERDAY, Phar.D. WILLARD S. RICHARDSON.

OFFICERS OF THE BOARD.

H. E. KALUSOWSKI, M.D., Chairman.
FRANK C. HENRY, Phar.D., Vice-Chairman.
W. H. BRADBURY, Phar.D., Secretary.
WALTER G. DUCKETT, Phar.D., Treasurer.

ADMINISTRATION AND INSTRUCTION.

Officers.

CHARLES WILLIS NEEDHAM, LL.D.....PRESIDENT OF THE UNIVERSITY
OTIS D. SWETT, B.S., LL.M.....Registrar of the University

President's Council.

CHARLES WILLIS NEEDHAM, LL.D.....PRESIDENT OF THE UNIVERSITY
JAMES HOWARD GORE, Ph.D.....Professor of Mathematics
HOWARD LINCOLN HODGKINS, Ph.D. .....Professor of Physics and Dean of Washington College of Engineering
JAMES MACBRIDE STERRETT, A.M., D.D.....Professor of Philosophy
CHARLES E. MUNROE, Ph.D.....Professor of Chemistry and Dean of the Faculty of Graduate Studies
HERMANN SCHOENFELD, Ph.D., LL.D.....Professor of German
CHARLES CLINTON SWISHER, Ph.D., LL.D.....Professor of History
WILLIAM ALLEN WILBUR, A.M.....Professor of English and Dean of Columbian College
MITCHELL CARROLL, Ph.D.....Professor of Classical Philology
GEORGE NEELY HENNING, A.M.....Professor of Romance Languages
PERCY ASH, C.E.....Professor of Architecture, in Charge of Division of Architecture
C. WILLIAM A. VEDITZ, Ph.D., LL.B.....Professor of Economics and Acting Dean of the College of the Political Sciences
WILLISTON S. HOUGH, Ph.M.....Professor of Philosophy, in Charge of Division of Education
FRANK LEIGHTON DAY, Ph.D.....Professor of Semitic Languages and Literatures
W. F. R. PHILLIPS, M.D.....Dean of the Faculty of Medicine
J. HALL LEWIS, D.D.S.....Dean of the Faculty of Dentistry
WILLIAM R. VANCE, Ph.D., LL.B.....Dean of the Faculty of Law
HENRY E. KALUSOWSKI, M.D., Phar.D..Dean of the National College of Pharmacy

University Council.

Professors and Assistant Professors in all Departments and Colleges of the University constitute the University Council. Their names appear in the list of Members of Faculties and Teaching Staff.

MEMBERS OF FACULTIES AND TEACHING STAFF.

(Arranged, with the exception of the President, in groups, in the order of appointment.)

CHARLES WILLIS NEEDHAM, LL.D.....PRESIDENT OF THE UNIVERSITY

Professors.

*J. FORD THOMPSON, M.D.....Professor of Surgery
ALBERT F. A. KING, A.M., M.D., LL.D.....Professor of Obstetrics and Dean Emeritus of the Faculty of Medicine
THEODORE NICHOLAS GILL, M.D., Ph.D., LL.D.....Professor of Zoölogy
JAMES HOWARD GORE, Ph.D.....Professor of Mathematics
GEORGE N. ACKER, A.M., M.D.....Professor of Pædiatrics and of Clinical Medicine
HOWARD LINCOLN HODGKINS, Ph.D.....Dean of Washington College of Engineering and Professor of Physics
CLEVELAND ABBE, A.M., LL.D.....Professor of Meteorology
HENRY C. YARROW, M.D.....Profesor of Dermatology
JAMES HALL LEWIS, D.D.S.....Dean of the Faculty of Dentistry and Professor of Dental Prosthetics
D. KERFOOT SHUTE, A.B., M.D.....Professor of Anatomy and of Clinical Ophthalmology
HENRY CLAY THOMPSON, D.D.S.....Professor of Operative Dentistry
WILLIAM P. CARR, M.D.....Professor of Surgery
JOHN MARSHALL HARLAN, LL.D.....Professor of Law
DAVID J. BREWER, LL.D.....Professor of Law
WILLIAM F. R. PHILLIPS, M.D.....Dean of the Faculty of Medicine, Professor of Hygiene and of Practical Anatomy
HERMANN SCHOENFELD, Ph.D., LL.D.....Professor of German
STERLING RUFFIN, M.D.....Professor of the Theory and Practice of Medicine and of Clinical Medicine
JONATHAN R. HAGAN, D.D.S.....Professor of Oral Surgery
WILLIAM K. BUTLER, A.M., M.D.....Professor of Ophthalmology
THOMAS E. MCARDLE, A.M., M.D.....Professor of Minor Surgery
JOHN VAN RENSSELAER, A.B., M.D.....Professor of Clinical Surgery
JAMES MACBRIDE STERRETT, A.M., D.D.....Professor of Philosophy
CHARLES EDWARD MUNROE, Ph.D.....Dean of the Faculty of Graduate Studies and Professor of Chemistry
GEORGE P. MERRILL, Ph.D.....Professor of Geology and Mineralogy
CHARLES W. RICHARDSON, M.D..Professor of Laryngology and Otology
EDGAR FRISBY, A.M.....Professor of Astronomy
FRANK WIGGLESWORTH CLARKE, Sc.D...Professor of Mineral Chemistry
HARVEY WASHINGTON WILEY, Ph.D., M.D...Professor of Agricultural Chemistry

*Absent on leave.

FRANK HAGAR BIGELOW, A.M., L.H.D.....Professor of Astro-Physics
G. WYTHE COOK, M.D.....Professor of Clinical Medicine
HERBERT LOUIS RICE, M.S.....Professor of Astronomy
MELVILLE CHURCH, LL.M.....Professor of the Law of Patents
WILLIAM ALLEN WILBUR, A.M.....Dean of Columbian College and Professor of English
FRANK A. WOLFF, Ph.D.....Professor of Electrical Engineering
J. WESLEY BOVÉE, M.D.....Professor of Gynecology
THOMAS A. CLAYTOR, M.D.....Professor of Materia Medica and Therapeutics and of Clinical Medicine
A. R. SHANDS, M.D.....Professor of Orthopedic Surgery
JAMES CARROLL, M.D.....Professor of Bacteriology and Pathology
CHARLES CLINTON SWISHER, Ph.D., LL.D.....Professor of History
RANDOLPH B. CARMICHAEL, M.D.....Professor of Clinical Dermatology
FRANCIS R. HAGNER, M.D.....Clinical Professor of Genito-Urinary Surgery and Venereal Diseases
JOHN B. NICHOLS, M.D.....Professor of Histology
HENRY A. PRESSEY, Ph.D.....Professor of Civil Engineering
WALTER C. CLEPHANE, LL.M.....Professor of Law
DAVID J. HILL, LL.D.....Professor of European Diplomacy
MITCHELL CARROLL, Ph.D.....Professor of Classical Philology and Director of University Publications
PAUL BARTSCH, M.S.....Professor of Zoölogy
EDWIN C. BRANDENBURG, LL.M.....Professor of Law
ARTHUR PETER, LL.M.....Professor of Law
W. C. WOODWARD, M.D., LL.M.....Professor of Medical Jurisprudence
ALBERT L. STAVELEY, M.D.....Clinical Professor of Gynecology
HENRY P. BLAIR, LL.M.....Professor of Law
STANTON J. PEELLE, LL.D.....Professor of Law
GEORGE N. HENNING, A.M.....Professor of Romance Languages
PERCY ASH, C.E.....Professor of Architecture, in Charge of Division of Architecture
JOHN PAUL EARNEST, A.M.....Professor of Law
OSCAR P. AUSTIN.....Professor of Commerce
WILLIAM REYNOLDS VANCE, Ph.D., LL.B.....Dean of the Faculty of Law and Professor of Law
J. H. P. BENSON, D.D.S.....Professor of Operative Technics
J. ROLAND WALTON, D.D.S.....Professor of Prosthetic Technics
WILLIAM A. WHITE, M.D.....Professor of Mental Diseases
ERNEST G. LORENZEN, Ph.B., LL.B., J.U.D.....Professor of Law
C. WILLIAM A. VEDITZ, Ph.D., LL.B.....Professor of Economics and Acting Dean of the College of the Political Sciences
GEORGE LANSING RAYMOND, L.H.D.....Professor of Æsthetics
ALBERT BURNLEY BIBB.....Professor of Architecture

WILLISTON S. HOUGH, Ph. B., Ph.M.....Professor of Philosophy
HENRY L. ABBOT, LL.D., Brig. Gen., U. S. A.,
Professor of Hydraulic Engineering
GEORGE M. STERNBERG, Surgeon General, U. S. A.,
Professor of Preventive Medicine
JAMES BROWN SCOTT, M.A., J.U.D.....Professor of Law
EDWARD BENNETT ROSA, Ph.D.....Professor of Physics
FRANK LEIGHTON DAY, Ph.D....Professor of Semitic Languages and Literatures
CHARLES H. CLARK, M.D.....Professor of Nervous Diseases
ARTHUR A. SNYDER, M.D.....Clinical Professor of Surgery
I. W. BLACKBURN, M.D.....Professor of Morbid Anatomy
ALBERT MANN, A.M., Ph.D.....Professor of Botany
SAMUEL WAGGAMAN, M.D., Phar.D.....Professor of Materia Medica, Botany and Toxicology
WILLIAM F. HILLEBRAND, Ph.D., Phar.D...Professor of Chemistry and Physics.
FREDERICK A. HOLTON, B.S., Phar.D..Professor of Analytical Chemistry
HENRY E. KALUSOWSKI, M.D., Phar.D....Dean of National College of Pharmacy and Professor of Pharmacy
BURTON, J. HOWARD, B.S.....Professor of Microscopy
EDWARD S. THURSTON.....Professor of Law
WILLIAM C. DENNIS.....Professor of Law
ASAPH HALL, JR., Ph.D.....Professor of Astronomy
HARRIETT STRATTON ELLIS, A.B.....Dean of Women and Instructor in English
SHEPHERD IVORY FRANZ, M.D.....Professor of Physiology and Experimental Psychology

Assistant Professors.

EDWARD ADAMS MUIR, B.S.....Assistant Professor of Graphics
EDWARD E. MORSE, M.D.....Assistant Professor of Obstetrics
EDWARD G. SEIBERT, M.D.....Assistant Professor of Chemistry
WILLIAM H. TRAIL, D.D.S.....Assistant Professor of Dental Materia Medica
NEVIL MONROE HOPKINS, Ph.D.....Assistant Professor of Chemistry
JOHN W. HOLCOMBE, A.M., M.Dip.....Assistant Professor of Comparative Politics
CHARLES SIDNEY SMITH, A.M..Assistant Professor of Greek and Latin
JULIAN M. CABELL, M.D.....Assistant Professor of Obstetrics
PHILANDER BETTS, E.E....Assistant Professor of Electrical Engineering
EDWIN A. HILL, Ph.D.....Assistant Professor of Chemistry
D. W. PRENTISS, M.D.....Assistant Professor of Histology
C. S. WHITE, M.D.....Assistant Professor of Physiology

THOMAS MALCOLM PRICE, Ph.D.....Assistant Professor of Chemistry
L. H. TAYLOR, M.D.....Assistant Professor of Physiology and Instructor in Clinical Surgery
JOHN R. WELLINGTON, M.D.....Assistant Professor of Clinical Surgery
JOHN H. LINDSEY, M.D.....Assistant Professor of Clinical Medicine Curator of the Pathological Museum
TIMOTHY W. STANTON, Ph.D.....Assistant Professor of Paleontology
RAY SMITH BASSLER, M.S.....Assistant Professor of Geology and Mineralogy
PAUL N. PECK, A.M.....Assistant Professor of Mathematics
DE WITT C. CROISSANT, A.B.....Assistant Professor of English
ALFRED F. W. SCHMIDT, A.M.....Assistant Professor of German, and Librarian
CHARLES T. BASSETT, D.D.S...Assistant Professor in Charge of Dental Infirmary
T. S. D. GRASTY, M.D.....Assistant Professor of Bacteriology and Pathology
H. H. DONNALLY, M.D.....Assistant Professor of Bacteriology and Pathology
JOHN T. KELLEY, M.D.....Assistant Clinical Professor of Surgery
DUFF G. LEWIS, M.D.....Assistant Clinical Professor of Surgery
JOSHUA R. CLARK, B.S., LL.B.....Assistant Professor of Law

Instructors, Demonstrators and Assistants.

SAMUEL H. GREENE, JR., M.D.....Instructor in Anatomy
HOMER S. MEDFORD, M.D.....Instructor in Obstetrics
L. H. REICHELDERFER, M.D.....Instructor in Medicine
EDGAR P. COPELAND, M.D.....Instructor in Surgery and in Pediatrics
J. L. RIGGLES, M.D.....Instructor in Anatomy
H. C. MACATEE, M.D....Instructor in Medicine and Clinical Instructor
G. BROWN MILLER, M.D.....Instructor in Gynecology
LEVI RUSSELL ALDEN, A.M.....Instructor in History
JOHN WILMER LATIMER, LL.B.....Clerk of the Moot Court
F. L. MOLBY.....Instructor in Freehand Drawing
O. A. M. MCKIMMIE, M.D.....Clinical Instructor in Laryngology and Ophthalmology
H. S. DYE, M.D., Clinical Instructor in Laryngology and Ophthalmology
OTIS D. SWETT, B.S., LL.M.....Instructor in Chemistry
OSCAR L. KEITH, A.M.....Instructor in Romance Languages
HENRY R. ELLIOTT, M.D.....Instructor in Physiology
WALTER H. MERRILL, M.D.....Instructor in Electro-Therapeutics
EDWIN V. DUNSTAN, C.E.....Instructor in Civil Engineering
ADOLPH A. HOEHLING, JR.....Associate Justice of the Moot Court of Appeals

B. M. Randolph, M.D.....Instructor in Pharmacology
Charles Mason Remey.....Instructor in Architecture
W. A. Frankland, M.D.....Instructor of Anatomy and Clinical Gynecology
Charles M. Beall.....Instructor in Physical Diagnosis
Harry C. Coburn, M.D.....Instructor in Physical Diagnosis and Demonstrator of Bacteriology and Pathology
J. Lawn Thompson, M.D.....Instructor in Surgery
Thomas F. J. Maguire, S.B.....Instructor in Electrical Engineering
George Albert Ross, M.S.....Instructor in Mathematics
Elmer S. Newton, B.A., M.D.....Instructor in Chemistry
Oscar A. Mechlin, C.E.....Instructor in Civil Engineering
James F. Peake, A.M.....Instructor in History
Walter O. Snelling, B.S., M.S.....Instructor in Chemistry
Arthur Cutts Willard, B.S.....Instructor in Mechanical Engineering
Everett W. Varney.....Instructor in Physics and Electricity
Charles B. Newcomer, Ph.D.....Instructor in Greek and Latin
Frederick I. Bartlett, D.D.S.....Instructor in Crown and Bridge Work and in Prosthetic Technics
Howard P. Cobey, D.D.S.....Instructor in Porcelain Work
Truman Abbe, M.D.....Instructor in Physiology
Arthur B. Cooper, D.D.S.....Instructor in Porcelain Work
A. B. Hooe, M.D.....Clinical Instructor in Gynecology
Allen S. Wolfe, D.D.S.....Instructor in Crown and Bridge Work and Prosthetic Technics
Huron W. Lawson, M.D., M.S.....Instructor in Bacteriology and Pathology
Cadmus Linden Odor, D.D.S.....Demonstrator of Operative Technics
Charles L. Bovée, D.D.S.....Demonstrator in the Dental Infirmary
Joseph Wood Pollock, D.D.S.....Assistant Demonstrator in the Dental Infirmary
Arthur Millard Trivett, D. D.S.....Assistant Demonstrator in the Dental Infirmary
Thomas R. Wilkerson, D.D.S.....Assistant Demonstrator in the Dental Infirmary
George B. Heinecke, M.D.....Assistant Demonstrator of Anatomy
Edward Elliott Richardson, M.D., M.S....Assistant Demonstrator of Anatomy
Joseph D. Rodgers, M.D.....Assistant Demonstrator of Anatomy
Edwin Smith, Jr., B.S.....Assistant in Assaying
Henry M. Jewett, M.D.....Assistant Instructor in Histology
William E. Hillyer, M.S.....Assistant in Chemistry
Henry Vernon Johnston.....Pharmacist in the Hospital
Wilbur R. Brandenburg, M.D.....Demonstrator of Bacteriology and Pathology

ERNEST W. BROWN.....Assistant in Chemistry
E. T. M. FRANKLIN.....Assistant in Minor Surgery
W. J. FRENCH.....Assistant in Minor Surgery
A. L. HUNT.....Assistant in Minor Surgery
CHARLES W. HYDE.....Assistant in Surgical Dispensary and Medical Dispensary
HUBERT P. ILLMAN.....Assistant in Architecture
GLENN I. JONES, M.D.....Assistant Demonstrator of Anatomy
E. P. MAGRUDER, A.M., M.D.....Assistant Demonstrator of Anatomy
J. J. WHARTON, M.D.....Assistant Demonstrator of Anatomy
J. D. MURRAY, M.D.....Assistant Demonstrator of Anatomy
DANIEL T. BIRTWELL, M.D.....Assistant Demonstrator of Anatomy
JOHN PAUL FREY.....Assistant in the Chemical Laboratory
A. PATTON CLARK.....Assistant in Chemistry
W. O. OWEN, M.D.....Assistant Demonstrator of Anatomy
W. E. CLARK, M.D.....Assistant in Bacteriology and Pathology
M. E. HARRISON, D.D.S.....Assistant Demonstrator in the Dental Infirmary
C. F. STEARNE, M.D.....Assistant in Surgical Dispensary
ADAM KEMBLE, M.D.....Assistant in the Gynecological Dispensary
C. L. BILLARD, M.D.....Assistant in the Eye, Ear, Throat, and Nose Dispensary

Lecturers.

OTIS T. MASON, LL.D.....Lecturer on Anthropology
WILLIAM T. HARRIS, LL.D.....Lecturer on the Philosophy of History
JOSEPH M. HELLER, M.D.....Lecturer on Diseases of the Tropics
EDGAR BUCKINGHAM, Ph.D.....Lecturer on Thermodynamics
FREDERICK E. FOWLE, JR., S.B.....Lecturer on Astro-Physics
JAMES C. MONAGHAN, A.M.....Lecturer on the Consular Service
WILLIAM HAMILTON, Ph.D.....Lecturer on History
NOBLE P. BARNES, M.D.....Lecturer on Materia Medica
JOHN W. FOSTER.....Lecturer on Diplomacy and Treaties
A. PRESS, B.S.....Lecturer in Electrical Engineering
ELMER ELLSWORTH BROWN, Ph.D.....Lecturer on Education
WILLIAM ESTABROOK CHANCELLOR, Ph.D.....Lecturer on Education
GEORGE E. MYERS, Ph.D.....Lecturer on Education
WILLARD S. SMALL, Ph.D.....Lecturer on Education
WILLIAM W. BLACK, A.M.....Lecturer on Education
STEPHEN ELLIOTT KRAMER, B.S.....Lecturer on Education

Library Staff.

Arts and Sciences.

ALFRED F. W. SCHMIDT, A.M.....Librarian
MABEL L. SCOTT.....Assistant

ROLF WALLACE BOND.....Assistant
LULU E. CONNER.....Assistant

Medicine.

W. F. MCLAUGHLIN.....Librarian
JOHN M. WILLIS.....Librarian

Law and College of the Political Sciences.

ANDREW CHRISTENSEN.....Assistant Librarian
PAUL A. REHR.....Assistant Librarian

ORGANIZATION.

The George Washington University comprehends the following Departments:

DEPARTMENT OF ARTS AND SCIENCES, including
- Faculty of Graduate Studies.
- Columbian College.
- Washington College of Engineering.
- Division of Architecture.
- College of the Political Sciences.
- Division of Education.

FACULTY OF MEDICINE:
- Department of Medicine.
- Department of Dentistry.

DEPARTMENT OF LAW.

NATIONAL COLLEGE OF PHARMACY.

THE UNIVERSITY ASSEMBLY.

The University Assembly meets regularly on Wednesdays throughout the session at 12 o'clock. Members of the faculties and students of all departments are expected to be present. The exercises are regularly presided over by the President. Religious services are held, official announcements are made, and an address is given by the President.

THE UNIVERSITY LIBRARY.

The University Library comprehends (1) the Library of the Department of Arts and Sciences, (2) the Law Library, and (3) the Medical Library. It is in charge of the Library Committee, composed of professors in the various departments who administer the expenditure of the annual appropriation for the purchase of new books and look after the general interests of the Library. Details are given under the sections of the Catalogue devoted to the several departments. The Germanic Library of the late Professor Richard Heinzel, of the University of Vienna, recently acquired by the University, contains 7,200 volumes

and pamphlets bearing on Germanic philology and literature, and a large number of works and periodicals in the cognate branches, especially Anglo-Saxon, Old English, the Romance and Slavic languages.

The classical library of the late Professor CURT WACHSMUTH, of the University of Leipsic, has been recently purchased by the University. It contains 7,900 volumes and pamphlets bearing on Greek and Roman philology, literature, archæology, and history.

The Library of Congress is steadily perfecting its collections of standard works in the various branches of university study, and advanced and graduate students are there given every facility for pursuing their investigations.

ANNUAL COMMENCEMENT AND FALL AND WINTER CONVOCATIONS.

The Annual Commencement is held on the first Wednesday in June. The Fall Convocation is held on the third Wednesday in October. The Winter Convocation is held on the 22d of February. Degrees are publicly conferred on Commencement Day and at the Fall and Winter Convocations. Members of the faculties and candidates for degrees are expected to appear in academic caps and gowns. Prizes for special excellence in any department are publicly delivered on Commencement Day.

PRIVILEGES IN GOVERNMENTAL INSTITUTIONS OPEN TO UNIVERSITY STUDENTS.

In order to promote research and the diffusion of knowledge, the Congress of the United States has made the scientific resources of the Government accessible to students under the terms of the following joint resolution, approved April 12, 1892:

"*Resolved by the Senate and House of Representatives of the United States of America in Congress assembled,* That the facilities for research and illustration in the following and any other governmental collections now existing or hereafter to be established in the city of Washington for the promotion of knowledge shall be accessible, under such rules and restrictions as the officers in charge of each collection may prescribe, subject to such authority as is now or may hereafter be permitted by law, to the scientific investigators and to students of any institution of higher education now incorporated or hereafter to be incorporated under the laws of Congress or of the District of Columbia, to wit:

1. Of the Library of Congress.
2. Of the National Museum.
3. Of the Patent Office.

4. Of the Bureau of Education.
5. Of the Bureau of Ethnology.
6. Of the Army Medical Museum.
7. Of the Department of Agriculture.
8. Of the Fish Commission.
9. Of the Botanic Gardens.
10. Of the Coast and Geodetic Survey.
11. Of the Geological Survey.
12. Of the Naval Observatory."

Libraries.—In the archives of the State and other Departments and in the statistical bureaus of these Departments are extensive accumulations of original historical documents and data which are invaluable to graduate students in history, political science, economics, sociology, and the allied topics of research. The Library of Congress, the Public Library of the District of Columbia, and the many highly specialized libraries attached to the various Departments of the Government are made easily accessible.

Museums.—In the collections of the National Museum, the Smithsonian Institution, the Army Medical Museum, the Museum of Naval Hygiene, and the departmental museums are found extensive series of specimens of great value to the student of anthropology, archæology, mineralogy, geology, paleontology, biology in all its branches, and other sciences. In the Patent Office are the records of the many inventions that have contributed so materially during our national existence to modify the conditions under which we live. The Army Medical Museum, which is open for inspection daily, presents a field for study superior to any other institution of the kind, either in this country or in Europe. Its library of medical books and periodicals is the best in the world. It has an unrivaled collection of anatomical and pathological specimens, illustrating normal anatomy and the results of disease in every form, and an almost unlimited number of other preparations showing the effect of gunshot wounds and surgical injuries of every kind. It also contains almost numberless crania of every human nationality. In the National Museum is found the most complete and best arranged collection of Materia Medica in the world. The drugs are shown in all their processes of manufacture, from the original package to the delicate alkaloid constituting the active principal.

Laboratories.—In the experimental sciences the most notable facilities are available, since in Washington are centered the Weather Bureau, with its appliances for the study of national problems in meteorology; the Coast and Geodetic Survey, from which the surveys of our territory are carried on and by which the figure of the earth and terrestrial mag-

netism are experimentally determined; the Hydrographic Bureau, which conducts the surveys of foreign coasts and the study of the oceans; the Bureau of Standards, which standardizes the instruments used in measuring mass, volume, heat, light, electricity, and all other magnitudes; the Geological Survey, which investigates the structure of the earth, ascertains our mineral resources, and supervises the sources of supply and means for distribution and control of water for irrigation purposes; the Department of Agriculture, which exists primarily for conducting original investigations for the benefit of agriculture in all its branches, and is therefore provided with extensively equipped laboratories for the study of chemistry, botany, vegetable physiology, entomology, bio-chemistry, bacteriology, comparative pathology, parasitology, the physics and chemistry of the soil, forestry, and microscopy; the Naval Observatory and Nautical Almanac Office, where researches in astronomy and navigation are conducted; the Marine Hospital Service, which deals with national problems in hygiene; the Bureaus of Construction and of Steam Engineering of the Navy, having supervision over the designs and construction of our ships; the Bureau of Yards and Docks, having supervision over the engineering operations at our navy yards and naval stations; the Bureau of Equipment, which is charged with the electrical installations for the Navy; the United States Signal Corps, which has supervision over the electrical installations for the Army; the Engineer Corps of the Army, which is charged with river and harbor improvements, and the Light-House Board, which controls the system for lighting our navigable waters.

Of chemical laboratories for conducting the tests of materials, and especially for research work, there are now eighteen attached to the different departments at Washington. An extensive new laboratory is being equipped for the Marine Hospital and Public Health Service. This is the national health department of the Government. In this laboratory and in the laboratories of the Department of Agriculture there are superior facilities for all kinds of bacteriological and chemical investigations, and for the study of bio-chemistry, comparative pathology, and parasitology. The new laboratories and hospitals of the Army and the Navy also offer many opportunities for instruction.

Washington offers exceptional opportunities for special or advanced work in Mechanical Engineering. The departments of the Government charged with designing are all located here. In the Bureaus of Steam Engineering and of Construction and Repair, and Ordnance, of the Navy, are projected a large amount and extensive variety of heavy constructional work. Here is also located the United States Navy or Ordnance Gun Factory. The Ordnance Proving Station is but a few miles down the Potomac. Tours of inspection may be made to the large steel works and shipbuilding plants in Baltimore, and to the shipbuilding plant at Newport News.

PART II.

DEPARTMENTS OF THE UNIVERSITY.

Department of Arts and Sciences.

The Department of Arts and Sciences comprehends the following:

I. Faculty of Graduate Studies.
II. Columbian College.
III. Washington College of Engineering.
IV. Division of Architecture.
V. College of the Political Sciences.
VI. Division of Education.

This Department is open to men and women who satisfy its requirements. The session of 1907-1908 begins Wednesday, September 25, 1907. The main building of the University, in which most of the courses of study are conducted, is University Hall, corner Fifteenth and H streets, N. W. The offices of the President, Treasurer, and Registrar of the University are in this building.

I. FACULTY OF GRADUATE STUDIES.

COMMITTEE ON HIGHER DEGREES.

Charles E. Munroe, *Chairman.*
J. Macbride Sterrett.
Hermann Schoenfeld.

FACULTY.

Charles Willis Needham, LL.D.....President of the University
Charles E. Munroe, Ph.D.....Dean, and Professor of Chemistry
James Howard Gore, Ph.D.....Professor of Mathematics
Howard Lincoln Hodgkins, Ph.D.....Professor of Physics
James Macbride Sterrett, D.D.....Professor of Philosophy
Hermann Schoenfeld, Ph.D.....Professor of German
Charles Clinton Swisher, Ph.D., LL.D.....Professor of History
William Allen Wilbur, A.M.....Professor of English
Mitchell Carroll, Ph.D.....Professor of Classical Philology
George N. Henning, A.M.....Professor of Romance Languages
Theodore N. Gill, Ph.D.....Professor of Zoölogy
Cleveland Abbe, LL.D.....Professor of Meteorology
Edgar Frisby, A.M.....Professor of Astronomy
Frank W. Clarke, Sc.D.....Professor of Mineral Chemistry
Harvey W. Wiley, Ph.D.....Professor of Agricultural Chemistry
Frank H. Bigelow, L.H.D.....Professor of Astro-Physics

GEORGE P. MERRILL, Ph.D.....Professor of Geology and Mineralogy
FRANK A. WOLFF, Ph.D.....Professor of Electrical Engineering
HERBERT L. RICE, M.S.....Professor of Astronomy
HENRY A. PRESSEY, Ph.D.....Professor of Civil Engineering
PAUL BARTSCH, M.S., Ph.D.....Professor of Zoölogy
PERCY ASH, C.E.....Professor of Architecture
C. W. A. VEDITZ, Ph.D.....Professor of Economics
GEORGE LANSING RAYMOND, L.H.D.....Professor of Æsthetics
WILLISTON S. HOUGH, Ph.M.....Professor of Philosophy
HENRY L. ABBOTT, Brig. Gen. U. S. A., LL.D.....Professor of Hydraulic Engineering
GEORGE M. STERNBERG, Surgeon Gen., U. S. A.....Professor of Preventive Medicine
EDWARD B. ROSA, Ph.D.....Professor of Physics
ASAPH HALL, JR., Ph.D.....Professor of Astronomy
SHEPHERD IVORY FRANZ, Ph.D...Professor of Experimental Psychology
ALBERT MANN, A.M., Ph.D.....Professor of Botany
N. MONROE HOPKINS, Ph.D.....Assistant Professor of Chemistry
CHARLES SIDNEY SMITH, Ph.D..Assistant Professor of Greek and Latin
EDWIN A. HILL, Ph.D.....Assistant Professor of Stereo-Chemistry
THOMAS M. PRICE, Ph.D.....Assistant Professor of Biochemistry
PHILANDER BETTS, M.S., E.E.....Assistant Professor of Electrical Engineering
TIMOTHY W. STANTON, Ph.D.....Assistant Professor of Paleontology
WILLIAM T. HARRIS, LL.D.....Lecturer on Philosophy
EDGAR BUCKINGHAM, Ph.D.....Lecturer on Thermodynamics
FREDERICK E. FOWLE, JR., S.B.....Lecturer on Astrophysics
A. PRESS, B.S.....Lecturer on Electrical Engineering
OTIS D. SWETT, B.S.....Secretary

The Division of Graduate Studies is charged with the development and supervision of research courses leading to the higher degrees. This work was organized at this University in 1893 with a view to enable properly equipped students to avail themselves of the advantages which Washington offers for original investigations. Announcements relative to the official matters of this Division are made at the University Assembly, and professors and students of this Division are expected to be governed by them.

HIGHER DEGREES.

The higher degrees conferred in course by the University in this Division of the Department of Arts and Sciences are Master of Arts (A.M.), Master of Science (M.S.), Civil Engineer (C.E.), Electrical Engineer (E.E.), Mechanical Engineer (M.E.), and Doctor of Philosophy (Ph.D.).

ADMISSION.

Candidates for admission to courses for higher degrees must present the diplomas they hold, or certificates that they have received such diplomas, to the Registrar of the University, and obtain from him application blanks. When properly filled and signed, these applications are to be submitted to the Chairman of the Committee on Higher Degrees, together with catalogues of the institutions from which they hold their degrees and certificates of their course of study at such institutions. All such applications should be accompanied by testimonials as to character and scholarship.

DEGREES OF MASTER OF ARTS AND MASTER OF SCIENCE.

To be admitted to candidacy for the Master's degree a student must have completed a liberal undergraduate course of study such as is required by colleges of good standing antecedent to the baccalaureate degree. The Faculty of Graduate Studies reserves the right to decide in all cases whether the antecedent training fulfils the requirements. Moreover, the courses of study pursued must have been such as to qualify the candidate for pursuing the chosen line of study for the Master's degree.

A candidate for this degree shall pass at least one full year of residence and study at this University, and sustain satisfactory examinations on the studies pursued and present an acceptable thesis, together with a bibliography. Three full courses throughout the year is the minimum required as constituting a full year's work. The courses chosen must be passed upon by the Faculty and have the approval of the professors under whom they are to be taken. These courses may consist of special study or research work. In any case they must form a consistent plan of work, for which the candidate's previous work has qualified him. No work done for a Bachelor's degree shall be counted again for a Master's degree.

HIGHER DEGREES IN ENGINEERING.

To be admitted to candidacy for higher degrees in Engineering a student must have completed a liberal undergraduate course of study such as is required by colleges of good standing antecedent to the baccalaureate degree in Engineering, and of such a character as to fit him to pursue to advantage the study of advanced engineering topics. The Faculty of Graduate Studies reserves the right to decide in all cases whether the antecedent training fufils the requirements. Moreover, the courses of study pursued for the Bachelor's degree must be approved by the Faculty as qualifying the candidate for pursuing the chosen line of study for the degree.

A candidate for a degree in Engineering shall pass at least one full year of residence and study at this University, and sustain satisfactory examinations on the studies pursued and present an acceptable thesis, together with a bibliography. Three full courses is the minimum required as constituting a full year's work. At least one-half of this work must be in the course in which the degree is sought and the balance in correlated courses. The courses chosen must be passed upon by the Faculty of Graduate Studies and have the approval of the professors under whom they are to be taken.

DEGREE OF DOCTOR OF PHILOSOPHY.

The degree of Doctor of Philosophy is conferred upon students who have pursued specialized courses in university subjects and engaged in original research in certain of the various departments of letters or science, under university auspices, for a period of not less than three years, and have submitted an acceptable thesis and met all the requirements prescribed. The degree is given, not because of the faithful completion of a course of study according to a stated program for a given length of time, but for high attainments and proved ability to do research work in some special branch of knowledge, as determined by the various tests applied.

Before a student can be admitted to candidacy for the degree of Doctor of Philosophy he must give evidence that he has completed a liberal undergraduate course of academic study such as is required by colleges of good standing antecedent to the baccalaureate degree, and of such a character as to fit him to pursue to advantage researches in the field chosen for graduate work. The Faculty of Graduate Studies reserves the right to decide in all cases whether the antecedent training fulfils the requirements. The applicant may be credited with gradate work done at other universities, provided such work is shown to be of grade similar to that required here, but at least one year must be spent in residence at this University and the other requirements of the degree as prescribed must be fulfilled.

Candidates for the degree of Doctor of Philosophy shall offer themselves in three topics from the university subjects—one major and two collateral minor studies—the combination to be approved by the Faculty of Graduate Studies. These must be pursued under the guidance of a committee consisting of the professors in charge of the University, subjects in which the studies are pursued, with the profesor in the major subject as chairman. This committee will determine his division of time, study, and research among the major and minor topics, but in general the major topic should be pursued during the whole time devoted to graduate work, and each minor topic during at least one year. The candidate shall pass satisfactory

examinations upon the three subjects selected. He must satisfy the professors of French and German within the first year of candidacy, that he can read understandingly, in the original, French and German works pertaining to his special field. In order to graduate the candidate must possess a broad acquaintance with his major topic and he must present a thesis which shall be a contribution to knowledge and which shall be accompanied by an adequate bibliography under the following regulations:

REGULATIONS REGARDING THESES.

Theses must be presented to the Dean not later than May 1 for graduation in June, or January 1 for graduation at the Winter Convocation.

After their acceptance, theses, with their accompanying drawings, are the property of the University, and must be deposited in the University archives, but authors are permitted to make copies. All these must be typewritten on official thesis paper, which be obtained from the Assistant Treasurer of the University. No thesis for the degree of Doctor of Philosophy shall be submitted to the University Council until it has been approved by the professor having supervision of the major topic, and also by a co-referee to be appointed by the President's Council. The referees shall present to the Council written reports on the thesis to be filed therewith. The candidate is expected to print his thesis, under the supervision of the professor in charge of his major topic, within one year after the degree is granted, and shall present one hundred copies to the University, to be distributed among institutions of learning. The candidate must defend his thesis before a board of experts consisting of three specialists of university standing and established reputation in the subject represented by the principal topic, to be appointed by the President's Council.

DOCTORATE DISPUTATION.

A Doctorate Disputation was held publicly in University Hall, May 23, 1906. The theses that were successully defended, the candidates, and the members of the boards of experts were as follows:

Thesis: Cranberry Diseases.

By Cornelius Lott Shear, B.S., M.S., University of Nebraska.

Before Frank H. Knowlton, Ph.D.
John R. Mohler, A.M., V.M.D.
Merton B. Waite, B.S.
Professor Albert Mann, Ph.D., presiding.

Thesis: The chemistry of different varieties and individual ears of sweet corn as affected by enzymes, climatic conditions, and breeding.

By MARTIN NORRIS STRAUGHN, B.S., Maryland Agricultural College; M.S., Columbian University.

Before EDWIN W. ALLEN, Ph.D.
HARRY J. PATTERSON, Ph.D.
CHARLES F. LANGWORTHY, Ph.D.
Prof. HARVEY W. WILEY, Ph.D., presiding.

The following Disputation was held at the same place on February 11, 1907:

Thesis: The effect of certain toxic solutions on nuclear and cell division in root tips of *Vicia faba.*

By WARNER W STOCKBERGER, B.S., Denison University.

Before THEODOR H. HOLM, Ph.D.
ALBERT F. WOODS, A.M
CHARLES O. TOWNSEND, Ph.D.
Professor ALBERT MANN, Ph.D., presiding.

TOPICS FOR STUDY.

The topics and courses from which elections may be made are announced in the second and third sections of University Subjects, Department of Arts and Sciences, and in the similar sections of the curricula of the Departments of Medicine and Law, and of the College of the Political Sciences. In filling out application blanks the course must be given.

II. COLUMBIAN COLLEGE.

FACULTY.

CHARLES WILLIS NEEDHAM, LL.D.....PRESIDENT OF THE UNIVERSITY
WILLIAM ALLEN WILBUR, A.M.....Dean and Professor of English
JAMES HOWARD GORE, Ph.D.....Professor of Mathematics
HOWARD LINCOLN HODGKINS, Ph.D.....Professor of Physics
JAMES MACBRIDE STERRETT, A.M., D.D.....Professor of Philosophy
CHARLES E. MUNROE, Ph.D.....Professor of Chemistry
HERMANN SCHOENFELD, Ph.D., LL.D.....Professor of German
CHARLES CLINTON SWISHER, Ph.D., LL.D.....Professor of History
MITCHELL CARROLL, Ph.D.....Professor of Classical Philology
GEORGE N. HENNING, A.M.....Professor of Romance Languages
PERCY ASH, C.E.....Professor of Architecture
C. WILLIAM A. VEDITZ, Ph.D., LL.B .....Professor of Economics
WILLISTON S. HOUGH, Ph.M.....Professor of Philosophy
FRANK LEIGHTON DAY, Ph.D.....Professor of Semitic Languages and Literatures
GEORGE P. MERRILL, Ph.D.....Professor of Geology and Mineralogy
PAUL BARTSCH, Ph.D.....Professor of Zoölogy
GEORGE LANSING RAYMOND, L.H.D.....Professor of Æsthetics
ALBERT MANN, Ph.D.....Professor of Botany
CHARLES SIDNEY SMITH, Ph.D..Assistant Professor of Greek and Latin
EDWIN A. HILL, Ph.D.....Assistant Professor of Chemistry
THOMAS MALCOLM PRICE, Ph.D.....Assistant Professor of Chemistry
PAUL NOBLE PECK, A.M.....Assistant Professor of Mathematics
DE WITT C. CROISSANT, A.B.....Assistant Professor of English
ALFRED F. W. SCHMIDT, A.M.....Assistant Professor of German and Librarian
R. S. BASSLER, Ph.D....Assistant Professor of Geology and Mineralogy
HARRIETT STRATTON ELLIS, A.B.....Dean of Women and Instructor in English
F. L. MOLBY.....Instructor in Freehand Drawing
*LEVI RUSSELL ALDEN, A.M.....Instructor in History
OTIS D. SWETT, B.S.....Instructor in Chemistry and Secretary
OSCAR L. KEITH, A.M.....Instructor in Romance Languages
EDWIN VIVIAN DUNSTAN, B.S.....Instructor in Civil Engineering and Graphics
JAMES FREDERICK PEAKE, A.M.....Instructor in History
WALTER OTHEMAN SNELLING, M.S.....Instructor in Chemistry
A. C. WILLARD, B.S.....Instructor in Mechanical Engineering
EVERETT W. VARNEY, A.B.....Instructor in Physics and Electricity

* Absent on leave.

GEORGE ALBERT ROSS, A.M.....Instructor in Mathematics
CHARLES B. NEWCOMER, Ph.D.....Instructor in Greek and Latin
WILLIAM HAMILTON, Ph.D.....Lecturer on History
EDWIN SMITH, JR., B.S.....Assistant in Assaying
WILLIAM E. HILLYER, M.S.....Assistant in Chemistry

The session of 1907-1908 begins Wednesday, September 25, 1907.

Columbian College is open to young men and young women. The courses of study in this department are conducted mainly in University Hall, corner Fifteenth and H streets, N. W. The office of the Dean of the College is in this building.

ADMISSION.

Every applicant for admission is required to present a testimonial of good character, and also a certificate of standing and regular dismissal from the school or college which he has attended or from the tutor with whom he has studied.

Candidates for admission to the Freshman Class may present certificates of admission or take an examination in the required subjects. Certificates, in lieu of any or all examinations, will be accepted from schools whose work is attested by well-prepared students admitted to the University in previous years, and from schools desiring coöperation with the University, that present evidence of affording adequate preparation in the required subjects. The Registrar of the University will, on application, furnish certificate blanks to the principals of such accredited schools.

The certificate of the College Entrance Examination Board will be accepted in so far as the subjects specified meet the requirements for admission.

The certificate of the Washington high schools covering all the requirements for admission admits students without examination to the courses of the Freshman year.

The certificates of all schools accredited to the University will be accepted in so far as they specially meet the requirements for admission.

The general requirement for admission is a four-year high school course, or its equivalent, consisting usually of four or five recitations per week in four or more topics. The high school studies which may be presented in satisfaction of the requirements of admission are given in the adjoining table, the unit being four or five recitations per week for one school year. The figures show the relative value of each subject. The list is substantially that set forth by the College Entrance Examination Board.

LIST OF PREPARATORY SUBJECTS FOR EXAMINATION.

	Units.		Units.
English	4	History:	
Latin:		English	1
Elementary	2	American and Civil Government	1
Advanced	2	Mathematics:	
Greek:		Elementary Algebra	1
Elementary	2	Advanced Algebra	½
Advanced	1	Plane Geometry	1
French:		Solid Geometry	½
Elementary	2	Plane Trigonometry	½
Advanced	2	Physics	1
Spanish	2	Chemistry	1
German:		Botany	1
Elementary	2	Zoölogy	1
Advanced	2	Physiography	1
History:		Drawing	1
Ancient	1	Shopwork	2
Mediæval and Modern	1		

ADMISSION TO BACHELOR OF ARTS COURSES.

Candidates for admission to the course leading to the degree of Bachelor of Arts are required to present subjects from the list of High School studies aggregating fifteen units, distributed as follows:

	Units.
English	4
Latin	4
Greek *or* French or German	3 *or* 2
Elementary Algebra	1
Plane Geometry	1
Electives	2 or 3
	15

ADMISSION TO BACHELOR OF SCIENCE COURSES.

Candidates for admission to the courses leading to the degree of Bachelor of Science are required to present subjects from the list of High School studies aggregating fifteen units, distributed as follows:

	Units.
English	4
French or German	2
Elementary Algebra	1
Plane Geometry	1
Physics	1
Chemistry	1
Electives	5
	15

EXAMINATIONS FOR ADMISSION.

The regular examination for admission to the Freshman Class is held in University Hall, corner of Fifteenth and H streets, N. W., during the week preceding the Commencement. The following is the schedule for the examination:

May 28, 1907.

Registration of Applicants at the Dean's office	8.30- 9.00
Latin; Drawing	9.00-11.00
Plane Geometry	11.00- 1.00
Elementary Algebra	2.00- 4.00

May 29.

Greek; Physics	9.00-11.00
Ancient History	11.00- 1.00
German	2.00- 4.00
French	4.00- 6.00

May 31.

Plane Trigonometry; Botany	9.00-11.00
English History	11.00- 1.00
English	2.00- 4.00

June 1.

Advanced Algebra; Zoölogy	9.00-11.00
Solid Geometry; Spanish	11.00- 1.00
Chemistry; Physiography	2.00- 4.00

Subjects offered for admission, but not named in the schedule of examinations, will be arranged for as occasion arises.

Unless admitted by certificate, every undergraduate candidate for a degree is required to pass an examination.

DEFINITION OF REQUIREMENTS.

ENGLISH.

(Counting four units.)

The requirement in English is that recommended by the Conference on Uniform Entrance Requirements in English.

NOTE.—No candidate will be accepted in English whose work is notably defective in point of spelling, punctuation, idiom, or division into paragraphs.

a. READING. The form of examination will usually be the writing of a paragraph or two on each of several topics to be chosen by the candidate from a considerable number—perhaps ten or fifteen—given in the examination paper. The treatment of these topics is designed to test the candidate's power of clear and accurate expression, and will call for only a general knowledge of the substance of the books. *In every case knowledge of the book will be regarded as less important than the ability to write good English.* In preparation for this part of the examination, it is important that the candidate shall have been instructed in the fundamental principles of rhetoric.

Candidates should read the books prescribed for the year in which they propose to present themselves for this part of the examination.

In 1907 and 1908 the books prescribed for this part of the examination are as follows:

Shakespeare's *The Merchant of Venice* and *Macbeth; The Sir Roger de Coverley Papers* in the Spectator; Irving's *Life of Goldsmith;* Coleridge's *The Ancient Mariner;* Scott's *Ivanhoe* and *The Lady of the Lake;* Tennyson's *Gareth and Lynette, Lancelot and Elaine,* and *The Passing of Arthur;* Lowell's *The Vision of Sir Launfal;* George Eliot's *Silas Marner.*

In 1909, 1910, and 1911 ten books, selected as prescribed below from the following list, are to be offered for examination:

Group I (two to be selected).

Shakespeare's *As You Like It, Henry V, Julius Cæsar, The Merchant of Venice, Twelfth Night.*

Group II (one to be selected).

Bacon's *Essays;* Bunyan's *The Pilgrim's Progress, Part I; The Sir Roger de Coverley Papers* in the Spectator; Franklin's *Autobiography.*

Group III (one to be selected).

Chaucer's *Prologue;* Spenser's *Faerie Queene* (selections); Pope's *The Rape of the Lock;* Goldsmith's *The Deserted Village;* Palgrave's *Golden Treasury (First Series), Books II and III,* with especial attention to Dryden, Collins, Gray, Cowper and Burns.

Group IV (two to be selected).

Goldsmith's *The Vicar of Wakefield;* Scott's *Ivanhoe;* Scott's *Quentin Durward;* Hawthorne's *The House of the Seven Gables;* Thackeray's *Henry Esmond;* Mrs. Gaskell's *Cranford;* Dickens' *A Tale of Two Cities;* George Eliot's *Silas Marner;* Blackmore's *Lorna Doone.*

Group V (two to be selected).

Irving's *Sketch Book;* Lamb's *Essays of Elia;* De Quincey's *Joan of Arc* and *The English Mail Coach;* Carlyle's *Heroes and Hero Worship;* Emerson's *Essays* (selected); Ruskin's *Sesame and Lilies.*

Group VI (two to be selected).

Coleridge's *The Ancient Mariner;* Scott's *The Lady of the Lake;* Byron's *Mazeppa* and *The Prisoner of Chillon;* Palgrave's *Golden Treasury (First Series), Book IV,* with especial attention to Wordsworth, Keats, and Shelley; Macaulay's *Lays of Ancient Rome;* Poe's *Poems;* Lowell's *The Vision of Sir Launfal;* Arnold's *Sohrab and Rustum;* Longfellow's *The Courtship of Miles Standish;* Tennyson's *Gareth and Lynette, Lancelot and Elaine,* and *The Passing of Arthur;* Browning's *Cavalier Tunes, The Lost Leader, How They Brought the Good News from Ghent to Aix, Evelyn Hope, Home Thoughts from Abroad, Home Thoughts from the Sea, Incident of the French Camp, The Boy and the Angel, One Word More, Harvé Riel, Pheidippides.*

b. Study and Practice. This part of the examination presupposes the thorough study of each of the works named below. The examination will be upon subject-matter, form, and structure. In addition, the candidate may be required to answer questions involving the essentials of English grammar, and questions on the leading facts in those periods of English literary history to which the prescribed works belong.

The books set for this part of the examination will be:

1907, 1908: Shakespeare's *Julius Cæsar;* Milton's *Lycidas, Comus, L'Allegro,* and *Il Penseroso;* Burke's *Speech on Conciliation with America;* Macaulay's *Essay on Addison* and *Life of Johnson.*

1909, 1910, 1911: Shakespeare's *Macbeth;* Milton's *Lycidas, Comus, L'Allegro,* and *Il Penseroso;* Burke's *Speech on Conciliation with America,* or Washington's *Farewell Address* and Webster's *First Bunker Hill Oration;* Macaulay's *Life of Johnson,* or Carlyle's *Essay on Burns.*

LATIN.

The minimum requirements in Latin and Greek are in substantial agreement with those of the College Entrance Examination Board, which carry out the recommendations of the Committee of Twelve of the American Philological Association:

The Elementary Requirement (counting two units).

a. i. Latin Grammar: The inflections; the simpler rules for composition and derivation of words; syntax of cases and the verbs; structure of sentences in general, with particular regard to relative and conditional sentences, indirect discourse, and the subjunctive; so much prosody as relates to accent, versification in general, and dactylic hexameter.

ii. Latin Prose Composition: Translation into Latin of detached sentences and easy continuous prose based upon Cæsar.

b. Cæsar: Any four books of the Gallic War, preferably the first four, or their equivalent.

The Advanced Requirement (counting two units).

a. Cicero: Any six orations from the following list, but preferably the first six mentioned:

The four orations against Catiline, Archias, the Manilian Law, Marcellus, Roscius, Milo, Sestius, Ligarius, the Fourteenth Philipic.

b. Vergil: The first six books of the Æneid.

c. Advanced Prose Composition, consisting of continuous prose of moderate difficulty based on Cicero.

d. Sight Translation, based on prose of no greater difficulty than the easier portions of Cicero's orations.

GREEK.

The Elementary Requirement (counting two units).

a. i. Greek Grammar: The topics for the examination in Greek grammar are similar to those detailed under Latin grammar.

ii. Greek Prose Composition, consisting principally of detached sentences to test the candidate's knowledge of grammatical constructions.

The examination in grammar and prose composition will be based on the first two books of Xenophon's Anabasis.

b. Xenophon: The first four books of the Anabasis.

The Advanced Requirement (counting one unit).

a. Homer: The first three books of the Iliad (omitting II, 494, to end).

b. Sight Translation, based on prose of no greater difficulty than Xenophon's Anabasis.

FRENCH.

Elementary (counting two units). Candidates in Elementary French must have a good knowledge of the essential parts of grammar, with stress on pronouns and on regular verbs and the common irregular

verbs. They must know the principles of pronunciation; must be able to translate simple English sentences or easy connected prose into French, and to translate accurately ordinary modern French prose. Candidates must have translated not less than 450 duodecimo pages by at least four different authors, of which amount at least one-third must be history. Candidates must have had a two-years' course of at at least four periods per week.

Advanced (counting two units). Candidates in Advanced French must have partly translated, partly read, in addition to the requirements for Elementary French, at least 1,000 pages of difficult French of several different authors, including history, fiction, drama, and poetry. Candidates must have had a four-years' course of at least four periods per week.

Fraser and Squair's French Grammar or Grandgent's Essentials of French Grammar is recommended.

SPANISH.

(Counting two units.)

Candidates in Spanish must have a good knowledge of grammar, including syntax, with stress on pronouns and verbs, regular and irregular. They must know the principles of pronunciation. They must be able to translate simple English sentences or easy connected prose into Spanish, and to translate accurately fairly difficult modern Spanish prose and verse. Candidates must have translated not less than 500 pages by at least four different authors, of which amount at least one-fourth must be history or drama. Candidates must have had a two-years' course of at least four periods per week.

GERMAN.

Elementary (counting two units). Candidates in Elementary German must have had a two-years' course of at least four periods a week. They must be able to read fluently at sight and to translate easy narrative prose and poetry. An accurate knowledge of an elementary German grammar is requisite, to be tested by the translation into German of some fifteen sentences. About 300 pages of graduated narrative prose, one short play, and such poetry as is usually found in a First Reader will be considered an adequate preparation.

Advanced (counting two units). Candidates in Advanced German must have had a four-year's course of at least four periods a week. They should be well trained in the syntactical laws of the language, have read about 800 pages of good literature in prose, preferably such prose works as are given in the Report of the Committee of Twelve of the Modern Language Association, and poetry, especially dramas by Les-

sing, Schiller, and Goethe, and studied an elementary history of German literature. German composition should comprise a number of short themes upon assigned historical or literary topics, lives of the authors read, etc.

HISTORY.

In this subject special importance is attached to preparation in geography.

Ancient (counting one unit).

a. Greek History, through the Roman Conquest; as much as is contained in Myer's History of Greece.

b. Roman History; as much as is contained in Allen's History of the Roman People.

Mediæval and Modern European History (counting one unit). As much as is contained in Myer's History of Mediæval and Modern Europe.

English History (counting one unit). As much as is contained in Larned's History of England.

American History with the Elements of Civil Government (counting one unit). As much as is contained in Fiske's History of the United States, and Fiske's Civil Government.

MATHEMATICS.

Elementary Algebra (counting one unit).

i. Algebra to Quadratics:

The four fundamental operations for rational algebraic expressions, factoring, highest common factor, lowest common multiple, complex fractions, the solution of equations of the first degree containing one or more unknown quantities, radicals, including the extraction of the square root of polynomials and numbers, and fractional and negative exponents.

ii. Quadratics, etc.:

Quadratic equations and equations containing one or more unknown quantites that can be solved by the methods of quadratic equations, problems depending upon such equations, ratio and proportion, and the binomial theorem for positive integral exponents.

Advanced Algebra (counting one-half unit).

i. Progressions, etc.:

The progressions, the elementary treatment of permutations and combinations, and the use of four and five place tables and logarithms.

ii. Series, etc.:

Undetermined coefficients, the elementary treatment of infinite series, the binomial theorem for fractional and negative exponents, and the theory of logarithms.

iii. Theory of equations.

Determinants and the elements of the theory of equations, including Horner's method for solving numerical equations.

Plane Geometry (counting one unit).

The solution of simple original exercises and numerical problems.

Solid Geometry (counting one-half unit).

Properties of straight lines and planes, of dihedral and polyhedral angles, of projections, of polyhedrons, including prisms, pyramids, and the regular solids; of cylinders, cones, and spheres, of spherical triangles, and the measurement of surfaces and solids.

Plane Trigonometry (counting one-half unit).

The definitions and relations of the six trigonometrical functions as ratios, proof of important formulæ, theory of logarithms and use of tables, solution of right and oblique plane triangles.

PHYSICS.

(Counting one unit.)

It is recommended that the candidate's preparation should include:

a. Individual laboratory work, comprising at least thirty-five exercises well distributed over the subjects of physics.

b. Instruction by lecture-table demonstrations.

c. The study of at least one standard text-book, supplemented by the use of many and varied numerical problems. The metric system should be familiar to the student.

The laboratory note book must be submitted for inspection, whether the candidate is admitted on certificate or by examination.

CHEMISTRY.

(Counting one unit.)

The candidate's preparation in chemistry should include:

a. Individual laboratory work, comprising at least forty experiments of a character analogous to those set forth by the College Entrance Examination Board.

On application for admission to this University, every candidate seeking credit in chemistry must present an indexed note book in which he has recorded the steps and the results of his laboratory exercises, bear-

ing an endorsement of the teacher who directed the student, written in ink on the inside of the cover.

b. Instruction by lecture-table demonstrations to be used in instructing the student as to methods of manipulation and as a basis for questioning him upon the general principles involved in his laboratory experiments.

c. The study of at least one modern text-book, to the end that the student may gain a comprehensive and connected view of the most important facts and laws of elementary chemistry.

Requirements. The ground to be covered should include the following: The chief physical and chemical characteristics, the isolation and the recognition of the following elements and the preparation and study of their principal compounds: *Oxygen, hydrogen, carbon, nitrogen, chlorine, bromine, iodine, fluorine, sulphur,* phosphorus, silicon, potassium, *sodium,* calcium, magnesium, *zinc,* copper, mercury, silver, aluminum, *lead,* tin, *iron,* manganese, chromium.

The more detailed study should be confined to the italicized *elements* (as such) and to a restricted list of compounds, such as water, hydrochloric acid, carbon monoxide, carbon dioxide, oxides of nitrogen, nitric acid, ammonia, sulphur dioxide, sulphuric acid, hydrogen sulphide, sodium hydroxide, ammonium hydroxide.

Attention should be given to the atmosphere (constitution and relation to animal and vegetable life) flame, acids, bases, salts, oxidation and reduction, crystallization, combining proportions by weight and volume, calculations founded on these and on Boyle's and Charles' laws, symbols, formulas, equations and nomenclature, atomic theory, atomic weights, nascent state, natural groupings of the elements solution (solvents and solubility of gases, liquids, and solids), strength of acids and bases, conservation and dissipation of energy, chemical energy and electrolysis, and of valence, electrolytic dissociation, osmosis, mass action in a very elementary way. Chemical terms should be clearly understood, and the student should be able to illustrate and apply the ideas that they embody. The theoretical topics are not intended to form separate subjects of study, but to be taught only so far as is necessary for the correlation and explanation of the experimental facts. The facts should be given as examples from various classes and not as isolated things.

BOTANY.

(Counting one unit.)

Candidates must have had at least one year's full work in botany, comprising the general principles of morphology, physiology, and ecology, as well as the natural history of plant groups and classification. Bergen's Foundations of Botany and Atkinson's Elementary Botany indicate the general scope of the work required.

ZOÖLOGY.

(Counting one unit.)

In general, zoölogy is not recommended as an entrance subject unless the subject has been preceded or accompanied by that of physics and chemistry, which form the most desirable groundwork for collegiate courses in biology. The entrance examination in zoölogy is designed to test, first, the candidate's practical acquaintance with the natural history, structure, and relationships of some of the leading types of animals, and, second, his knowledge of the more essential facts of physiology.

Practical Zoölogy. A practical examination of at least ten common animal types, and the presentation by the candidate of a laboratory note book, certified by the teacher, as evidence of a laboratory course actually performed. Examples of the types suggested are the frog, fish, mollusk, insects, crustaceans, annelid, starfish, hydroid (hydra), and protozoan. In the examination less weight is laid on a knowledge of anatomical *minutiæ* than on the ability to recognize the specimen and its allies, to indicate its relationship, and to point out the leading features of its life history, organization, and physiology.

Elementary Physiology. The nature of foods and their history in the body; the essential facts of digestion, absorption, circulation, secretion, excretion and respiration; the motor, nervous, and sensory functions, and the structure of the various organs by which these operations are performed. Martin's *Human Body* (briefer course) forms a suitable basis for this work, but teachers are recommended as far as possible to correlate the physiology of man and the higher animals with that of the lower forms studied in the course of practical zoölogy.

PHYSIOGRAPHY.

(Counting one unit.)

The equivalent of Davis' Physical Geography is required, together with an approved laboratory and field course of at least forty exercises actually performed by the candidate.

The candidate will be required to present at the time of his examination the original note book in which he recorded, with dates, the steps and results of his laboratory exercises. This book, which should contain an index of subjects, must bear the endorsement of the teacher, certifying that it is a true record of the candidate's work.

DRAWING.

(Counting one unit.)

The candidate's preparation in drawing should include simple geometrical plane, and solid figures and simple pieces of machinery, with

a fair knowledge of the rules of perspective and light and shade as applied in freehand sketching. The candidate should be able to reproduce from a flat copy with enlargement or reduction of size.

For courses in architecture, the preparation should include, in addition to the above, the drawing of simple pieces of architectural ornament (a Greek anthemium, a design of iron scrollwork, etc.).

For courses in engineering the preparation should include the copying of machinery details.

For courses in general science or in science for teachers, the preparation should include the copying of still life and simple plant forms.

SHOPWORK.

Candidates who have been trained in manual-training schools or in commercial shops in the use of tools and in the ordinary processes employed in the working of wood or metal may receive admission credits for such work. They should submit letters from their teachers or employers, stating the character of the work in which they have been trained and the time given to it. The amount of credit will vary according to circumstances, but it will not exceed two units.

ADMISSION TO ADVANCED STANDING.

Candidates for admission to advanced classes in any department are examined in all indispensable preliminary studies.

Due credit is given for properly certified courses of study pursued in other colleges and universities.

ADMISSION TO SPECIAL COURSES.

All the courses of instruction are open to students of suitable age and attainments who wish, without reference to any degree, to pursue special studies. Candidates must show that they are familiar with the subjects preliminary to the studies which they wish to pursue.

REQUIREMENTS FOR DEGREES.

The undergraduate degrees offered by Columbian College are Bachelor of Arts and Bachelor of Science. To be recommended for either of these degrees, the student must be registered for at least one academic year, must satisfy the admission requirements, and must complete at least sixty hours of undergraduate courses with the requisite grades.

The studies to be taken by a student during his college course, while largely elective, should be chosen with careful attention to their relation to each other and to his aims and purposes for the future. In general, the courses to be taken during the early years are those given

under the first section in University Subjects, while courses under the second section are elected during the latter part of the course. No time limit is prescribed and the degree is given when the total of prescribed and elective courses is completed.

BACHELOR OF ARTS COURSE.

To be recommended for the degree of Bachelor of Arts, the student must complete courses of study aggregating at least sixty units. The unit of credit is one hour of recitation or lecture work per week for one academic year. Laboratory hours in Chemistry and in Architecture count one-third unit each, in other subjects one-half unit each. Fifteen units are of prescribed studies and forty-five are electives. The prescribed studies are the following:

	Units.
English	3
Mathematics	3
Latin or Greek	3
French or German	3
Philosophy	3

BACHELOR OF SCIENCE COURSES.

General Course for the Degree of Bachelor of Science.

To be recommended for the degree of Bachelor of Science, the student must complete courses of study aggregating at least sixty units. The unit of credit is one hour of recitation or lecture work per week for one academic year. Laboratory hours in Chemistry and in Architecture count one-third unit, in other subjects one-half unit each. Fifteen units are of prescribed studies and forty-five are electives. The prescribed studies are the following:

	Units.
English	3
Mathematics	3
French or German	3
Sciences	6

For the Degree of Bachelor of Science in Chemistry.

Freshman Year.

	Units.		Units.
Chemistry, 1, 2	5	French or German	3
English, 1, 9, or 2, 10	3	Graphics, 1	2
Mathematics, 3, 5, 7, or 6, 8, 10	3		

Sophomore Year.

	Units.		Units.
Chemistry, 3 20	5	Mathematics, 9, 11, or 12, 14	3
French or German	3	Physics, 1, 2	5

Junior Year.

Architecture, 1	1	Graphics, 2	2
Chemistry, 4, 21, 23	6	Geology, 1	2
French or German	3		

Senior Year.

Chemistry, 6, 24, 25, 27	11	Geology, 2	2
Economics or History	2	Electives	2

COMBINED COURSES.

The regular courses in Columbian College are so correlated with the courses in Law and in Medicine that both the Bachelor's degree in the college and the professional degree may be obtained in a period of six years.

PRIZES.

Only candidates for degrees may compete for these prizes.

Staughton and Elton Prizes.—The Staughton Prize, for excellence in the Latin Language and Literature, and the Elton Prize, for excellence in the Greek Language and Literature, founded by the Rev. Romeo Elton, D.D., of Exeter, England, consist of two gold medals, annually awarded to the best scholar in each of these languages.

Ruggles Prizes.—The Ruggles Prizes, for excellence in Mathematics, founded by Professor William Ruggles, LL.D., consist of two gold medals, annually awarded upon examination to the best two scholars in Mathematics.

Munroe Prize.—Profesor Munroe offers a gold medal to that student from any Washington high school or the Manual Training School who shall attain the highest mark in Chemistry among those passing the entrance examinations, and shall remain in regular attendance for one year.

Class of '96 James Macbride Sterrett, Jr., Memorial Medal.—This prize is annually awarded to that student taking Course 1 in Physics who obtains the highest average in a special examination on a given subject and in the writing of an essay on an assigned topic.

Davis Prizes.—The Davis Prizes, for excellence in Elocution, founded by the Hon. Isaac Davis LL.D., of Massachusetts, consist of three gold medals, annually awarded to the successful competitors in a public contest. Only members of the Senior Class are eligible to compete for these prizes.

Daughters of the American Revolution Prizes.—These prizes, founded by the Daughters of the American Revolution of the District of Columbia, consist of two gold medals, awarded annually to the two students in the graduating class who, having maintained a high standing in the regular courses in Mediæval, Modern, European, English, and American History during three years, shall produce the best essays upon an assigned topic of American history.

Thomas F. Walsh Prize in Irish History.—This prize is a gold medal, awarded to that student in the graduating class who, having maintained a high standard in the regular courses of Mediæval, Modern, European, American, and English History, shall produce the best essay based upon the study of some period of Irish history.

E. K. Cutter Prize.—The E. K. Cutter Prize in English was founded by the late Marion Kendall Cutter. The endowment is a fund of one thousand dollars, the income of which is given annually as a prize "for excellence in the study of English." The prize will be awarded to that member of the graduating class whose record in English, combined with general excellence, shows most marked aptitude and attainment in English studies.

Willie E. Fitch Prize.—The Willie E. Fitch Prize, for highest excellence in all branches of Chemistry, founded by James E. Fitch, Esq., in memory of his son, consists of fifty dollars, which is awarded annually for the best examination in Chemistry.

Old and Middle English Prize.—This is a prize of twenty-five dollars awarded to the student showing the greatest proficiency in English 21 and 30.

PRIZE AWARDS, 1905-06.

Staughton Prize		Louise Jane Smith
Elton Prize		William Webb Sniffin
Ruggles Prize		Katherine Harrington
Munroe Prize		Loren Heinlein Call
Class of '96 James Macbride Sterrett, Jr., Memorial Medal		Bertha Birtwell
Davis Prizes	First Prize:	Clara Velma Barber
	Second Prize:	Adon Daniel Phillips
	Third Prize:	Charlotte Reinke
Daughters of the American Revolution Prizes		Ada Belle Burgdorf
		Ethel Hanna McCleary
Thomas F. Walsh Prize		Katherine Harrington
E. K. Cutter Prize		Rhoda Watkins
Schmidt Prize		Ara Marcus Daniels, Jr.
Muth Prize		Richard Bragaw

SCHOLARSHIPS.

Applications for scholarships should be filed with the Dean not later than September fifteenth. All scholarships except the Kendall Scholarship and the University Scholarships are awarded for one year only, but they may be renewed. Any student holding a scholarship who fails to obtain a general average of 85 per cent on the work of any term or whose deportment is unsatisfactory will be reported to the President's Council, and in the absence of extenuating circumstances the scholarship will be revoked.

KENDALL SCHOLARSHIP.—The Kendall Scholarship, founded by the late Hon. Amos Kendall, is annually conferred on that student from any of the Washington High Schools or from the Manual Training Schools who attains the highest average in the May entrance examinations. This scholarship continues throughout the undergraduate course, and the student holding it pays only the matriculation, library, laboratory, and graduation fees.

UNIVERSITY SCHOLARSHIPS.—The University offers also six scholarships, each continuing throughout the undergraduate course, to be awarded annually to members of the graduating classes of the high schools of Washington and of the Manual Training School. The scholarships will be divided among the several schools in proportion to the number of students in attendance upon each. Three scholarships are offered to young men and three to young women. No scholarship will be awarded to a candidate whose examination average is below 80 per cent. Candidates for these scholarships will take the May entrance examinations for the undergraduate course leading to the degree of Bachelor of Arts or the degree of Bachelor of Science, as they shall elect, and on the results of these examinations the scholarships will be assigned. Holders of these scholarships will be expected to pursue a regular course in the Department of Arts and Sciences leading to a degree. Such students will pay only the matriculation, library, laboratory, and graduation fees.

DAVIS SCHOLARSHIP.—This is the income of a fund of one thousand dollars given to the University in October, 1869, by Hon. Isaac Davis, of Massachusetts.

MARY LOWELL STONE SCHOLARSHIP.—This scholarship was founded by a woman in memory of a woman student of science. It consists of a fund of two thousand dollars, the income from which is to be paid to needy women students of science in the University; it will be awarded by the President's Council.

MARIA M. CARTER SCHOLARSHIP.—This is the income of a fund of one thousand dollars given to the University in 1871 by Mrs. Maria M. Carter.

FARNHAM SCHOLARSHIP.—This is the income of a fund of one thousand dollars given to the University in 1871 by Mrs. Robert Farnham.

ADMIRAL POWELL SCHOLARSHIPS.—The Admiral Powell Scholarships were founded by the late Admiral Powell, U. S. Navy. The income from this endowment is for the "free education of such young men as may desire to take advantage of the said endowment by way of their preparation for entrance into the Naval Academy at Annapolis, Maryland, or such as may fit them to become mates or masters in the Merchant Marine Service of the United States," and of "such apprentices as, having filled their time in the great steam manufactory establishments of the country, may apply for appointment from civil life in the Steam Engineer Department of the United States Navy." The number of scholarships awarded each year will be determined by the income from the endowment. Each scholarship will entitle the beneficiary to free tuition for one year. Such special courses of study are offered to each student as will give him the instruction needed to accomplish the purpose for which he is awarded the scholarship.

These scholarships are especially applicable to those who intend to come up for examination as warrant officers in the Engineer Department of the Navy, or to those who desire to fit for responsible positions in the mercantile marine.

The subjects to be taken by a student will vary according to his preparation and according to the purpose for which he has been awarded the scholarship, but a year's work can be selected from the following topics:

	Hours.
Navigation and Nautical Astronomy	6
Algebra and Geometry	3
Trigonometry	1½
Mechanical and Machine Drawing	4
Meteorology	2
English	3
French	3
German	3
Spanish	3
International Law	1
Commercial Geography	1
Admiralty Law	½
Boilers and Power Plants	3
Measurement of Power	3
Dynamo theory	2
Dynamo testing	3

DAVIS PRIZE SPEAKING.

The Davis Prize Speaking is held in University Hall on the Wednesday after the Easter holidays. The Davis Prizes were founded by Hon. Isaac Davis, of Massachusetts, in 1847. The original endowment was five hundred dollars, "proceeds of which will afford three premiums, in cash or gold medals, of the value of $5, of $10, and of $15 annually—these premiums or prizes to be distributed annually to such members of the Senior Class as shall have made the greatest progress in elocution since their connection with the College."

The award of these three prizes is determined by a public speaking contest, in which the participants deliver original orations. Senior students wishing to enter the competition should report to the Dean of the College not later than five weeks before the contest, and submit their orations not later than three weeks before the contest. The prizes are awarded by a committee consisting of three members, selected by the College Faculty.

DEAN OF WOMEN.

The Dean of Women has general oversight of the women students. She will assist them to find desirable boarding places and associations in the city. She will advise them in all College matters excepting those pertaining to the educational and general administrative functions of the Dean. She may be consulted in her office at all times and she will exercise supervision over the social activities of the women students.

ENOSINIAN SOCIETY.

The Enosinian Society, a literary association formed by the students of Columbian College, to which any University student is eligible, meets regularly for the purpose of improvement in debate and composition.

This society had its beginning March 6, 1822, during the first session of Columbian College, when a number of students held a meeting "for the purpose of establishing a debating society." Two Enosinian prizes are given annually and are publicly delivered at the Commencement. They are the following:

Debaters' Prize.—A gold medal given by the Society for proficiency in debate. This prize was awarded in 1906 to Clarence Willard Whitmore.

Gore Prize in Parliamentary Law.—A gold medal given by Prof. James Howard Gore for proficiency in parliamentary law. This prize was awarded in 1906 to Karl Morgan Block.

THE CHRISTIAN ASSOCIATION.

The student movement in Association work is represented by the Young Men's Christian Association of The George Washington University, which was organized in the fall of 1905. The Association plans and conducts religious work among the men of the University. The Association calendar includes Bible study clubs, a weekly chapel service, and occasional men's meetings.

Similar lines of religious work are conducted among the women students by the Young Women's Christian Association of Columbian College.

THE COLLEGE CHAPEL.

Chapel services are conducted in West Hall on Monday, Tuesday, Thursday, and Friday mornings throughout the academic year, at 9 o'clock. The College Chapel is conducted by the Faculty, and all students are invited to help sustain the service. On Wednesdays, at 12 o'clock, the College students participate in the University Assembly, which is held in University Hall.

The Dean of the College will confer with students on questions concerning their welfare and will co-operate with them in furthering the ethical and religious interests of the College.

Official announcements are made regularly at the University Assembly, and professors and students are expected to be governed by them.

III. WASHINGTON COLLEGE OF ENGINEERING.

FACULTY.

CHARLES WILLIS NEEDHAM, LL.D.....PRESIDENT OF THE UNIVERSITY
HOWARD LINCOLN HODGKINS, Ph. D.....Dean and Professor of Physics
JAMES HOWARD GORE, Ph.D.....Professor of Mathematics
HERMANN SCHOENFELD, Ph.D., LL.D.....Professor of German
CHARLES E. MUNROE, Ph.D.....Professor of Chemistry
WILLIAM ALLEN WILBUR, A.M.....Professor of English
GEORGE N. HENNING, A.M.....Professor of Romance Languages
PERCY ASH, C.E.....Professor of Architecture
GEORGE P. MERRILL, Ph.D.....Professor of Geology and Mineralogy
C. WILLIAM A. VEDITZ, Ph.D., LL.B.....Professor of Economics
EDWARD ADAMS MUIR, B.S.....Assistant Professor of Graphics
PHILANDER BETTS, E.E....Assistant Professor of Electrical Engineering
EDWIN A. HILL, Ph.D.....Assistant Professor of Chemistry
R. S. BASSLER, Ph.D.....Assistant Professor of Geology
PAUL NOBLE PECK, A.M.....Assistant Professor of Mathematics
DE WITT C. CROISSANT, A.B.....Assistant Professor of English
ALFRED F. W. SCHMIDT, A.M.....Assistant Professor of German
F. L. MOLBY.....Instructor in Freehand Drawing
OTIS D. SWETT, B.S.....Instructor in Chemistry
OSCAR L. KEITH, A.M.....Instructor in Romance Languages
EDWIN V. DUNSTAN, C.E.....Instructor in Civil Engineering
OSCAR A. MECHLIN, C.E.....Instructor in Civil Engineering
ARTHUR CUTTS WILLARD, B.S.....Instructor in Mechanical Engineering
EVERETT W. VARNEY, A.B.....Instructor in Physics and Electricity
THOMAS F. J. MAGUIRE, B.S.....Instructor in Electrical Engineering
GEORGE A. ROSS, A.M.....Instructor in Mathematics
WALTER OTHEMAN SNELLING, M.S.....Instructor in Chemistry
WILLIAM E. HILLYER, M.S.....Assistant in Chemistry

The session of 1907-1908 begins Wednesday, September 25, 1907.

The main building of the University, in which the general studies in this department are conducted, is University Hall, corner Fifteenth and H streets, N. W. The office of the Dean of the College is in this building.

ADMISSION.

Every applicant for admission is required to present a testimonial of good character, and also a certificate of standing and regular dismissal from the school or college which he has attended or from the tutor with whom he has studied.

Candidates for admission to the Freshman Class may present certificates of admission or take an examination in the required subjects. Certificates, in lieu of any or all examinations, will be accepted from schools whose work is attested by well-prepared students admitted to the University in previous years, and from schools desiring coöperation with the University, that present evidence of affording adequate preparation in the required subjects. The Registrar of the University will, on application, furnish certificate blanks to the principals of such accredited schools.

The certificate of the College Entrance Examination Board will be accepted in so far as the subjects specified meet the requirements for admission.

The certificate of the Washington high schools covering all the requirements for admission admits students without examination to the courses of the Freshman year.

The certificates of all schools accredited to the University will be accepted in so far as they specially meet the requirements for admission.

The general requirement for admission is a four-year high school course, or its equivalent, consisting usually of four or five recitations per week in four or more topics. The high school studies which may be presented in satisfaction of the requirements of admission are given on pages 39-47 of this Catalogue.

Candidates for admission to the Freshman Class in the College of Engineering are required to present fifteen units for admission, distributed as follows:

	Units.
English	4
French or German	4
Plane and Solid Geometry	1½
Elementary and Advanced Algebra	1½
Plane Trigonometry	½
Chemistry	1
Physics	1
Electives	1½
	15

NOTE.—The modern language requirement may be satisfied by presenting four units in one language, or two units in French and two units in German. Students who present four units in one language will study the other language two years in College. Students who present two units in French and two units in German will study each language one year in College.

ADMISSION TO ADVANCED STANDING.

Candidates for admission to advanced classes in any department are examined in all indispensable preliminary studies.

Due credit is given for properly certified courses of study pursued in other colleges and universities.

ADMISSION TO SPECIAL COURSES.

All the courses of instruction are open to students of suitable age and attainments who wish, without reference to any degree, to pursue special studies. Candidates must show that they are familiar with the subjects preliminary to the studies which they wish to pursue.

COURSES FOR A DEGREE.

Three courses of study are offered:

I. Civil Engineering.

II. Electrical Engineering.

III. Mechanical Engineering.

These courses occupy four years each, and lead to the degree of Bachelor of Science in Civil Engineering, in Electrical Engineering, and in Mechanical Engineering, respectively. Graduate courses of one year under the Faculty of Graduate Studies of the George Washington University are open to those who receive the above degrees, and lead, respectively, to the degrees of Civil Engineer, Electrical Engineer, and Mechanical Engineer.

The courses in engineering are planned to give the student a thorough understanding of the theory underlying engineering practice, and such a practical knowledge of the instruments and methods of his particular profession as will enable him to apply the theory properly. In all the courses a thorough training in mathematics, pure and applied, and in drawing and descriptive geometry is required as the basis of the analytical and graphical study of engineering topics. Much stress is laid on the work in the drawing-room and laboratory. The work is planned to give him a thorough knowledge of principles upon which he may build, and by which he may be able to solve the new problems he meets in practice.

The work of the first year is the same for all students. It is taken up partly with general studies which have both an educational and a cultural value, and partly with work in mathematics and drawing which lays the foundations for the subsequent courses. In each of the other years there are studies taken in common by all engineering students, these studies including courses in English, in French and German, in

pure and applied mathematics, in drawing and descriptive geometry, in chemistry and in physics. The requirement in French and German is intended to give the student an accurate reading knowledge of these languages, with particular reference to scientific literature.

Beginning with the Sophomore year, the Civil Engineering student enters upon his technical studies, continuing at the same time a number of topics of a more general character, and in the Junior and Senior years the work becomes yet more specialized. He begins with a general course in surveying and follows this with courses in railroad and highway location and construction. Theoretical hydraulics and hydraulic engineering receive careful and detailed treatment and much stress is laid on sanitary work, both in its theory and applications. A preliminary course in engineering materials and simple constructions in the Sophomore year is followed in later years by extended courses in mechanics of materials, and in the theory and design of structures in wood, steel, and masonry, in which are applied the knowledge gained in the courses in mechanics and graphic statics.

The courses for Electrical and Mechanical Engineering students are the same during the Sophomore year, and beside the general studies required of all engineering students include courses in advanced drawing and design and in kinematics of machinery. Shopwork begins in this year and continues until the end of the course for both classes of students, although the Electrical students give less time to it than do the Mechanical students. The purpose of the work is not primarily to give manual skill, but to give such an understanding of tools and processes as will be of assistance in designing and in superintending. In the Junior Year Electrical and Mechanical students continue work in machine design, and take courses in steam engineering and on boilers and power plants.

The Electrical students begin their special work in electricity in the Junior year. Theoretical electricity is first studied, and is followed by engineering electricity, and by courses on direct current machinery. In the laboratory, experimental work in exact measurements is followed by the study of the dynamo. In the drawing-room are studied related problems in design. In the Senior year alternating current machinery is studied, both theoretically and practically; and courses on the applications of electricity and on light and power distribution are taken. Many hours are given to work in the electrical and general engineering laboratories.

The Mechanical Engineering students, in addition to the courses which they take in common with the electrical students, have courses in engine design, including steam and gas engines; in hydraulics and hydraulic

machinery; and a course in electrical engineering, considering electrical machinery from the standpoint of one who is to use it rather than to design it.

The engineering courses are partly lecture and partly laboratory and drawing-room courses, the plan being to give the theory in the class-room, to illustrate the theory in the laboratory, and to have the student apply the theory, from given data, in the drawing-room.

REQUIREMENTS FOR A DEGREE.

The arrangement of the topics in each of the regular courses for a degree is shown below. The numbers following the names of subjects refer to the courses as given in the list of University Subjects on pages 76 to 120, to which reference should be made for more complete description.

COMMON TO ALL COURSES.

Freshman Year.

	Units.
Chemistry, 1, 7	5
General Chemistry and Qualitative Analysis.	
English, 1, 9 or 2, 10	3
Rhetoric, Logic, and Psychology.	
French or German	3
Graphics, 1	2
Mechanical and Freehand Drawing.	
Mathematics, 9, 11 or 12, 14	3
Trigonometry; Analytic Geometry.	

CIVIL ENGINEERING COURSE.

Sophomore Year.

	Units.
Civil Engineering, 1, 4	5
Surveying; Materials of Construction.	
French or German	3
Graphics, 8, 10	4
Descriptive Geometry; Topographic Drawing.	
Mathematics, 20, 22 or 21, 22	3
Calculus; Differential Equations.	
Physics, 1, 2	5
General Physics; Laboratory Physics.	

Junior Year.

	Units.
Applied Mathematics, 20, 21, 22 ..... Mechanics; Hydraulics; Mechanics of Materials.	6
Astronomy	1
Civil Engineering, 2, 3, 7, 22..... Railroad Engineering; Highway Engineering; Engineering Testing; Theory of Structures.	9½
Electrical Engineering, 6 ..... Industrial Engineering.	1
Geology	2

Senior Year.

Chemistry, 6 ..... Metallurgy.	1
Civil Engineering, 20, 21, 23, 24..... Masonry; Hydraulic Engineering; Theory of Structures; Sanitary Engineering.	16
Contracts and Business Law.....	2
Mechanical Engineering, 12 ..... Steam Engineering.	2

ELECTRICAL ENGINEERING COURSE.

Sophomore Year.

	Units.
French or German	3
Graphics, 2, 8 ..... Advanced Mechanical Drawing; Descriptive Geometry.	5
Mathematics, 20, 22 or 21, 22 ..... Calculus; Differential Equations.	3
Mechanical Engineering, 2, 8..... Mechanism; Shop-work.	4
Physics, 1, 2 ..... General Physics; Laboratory Physics.	5

Junior Year.

Applied Mathematics, 20, 21, 22 ..... Mechanics; Hydraulics; Mechanics of Materials.	6
Electrical Engineering, 1, 2, 3, 4, 5..... Elementary Electricity; Direct Current Machinery; Electrical Engineering; Electrical Measurements; Electrical Engineering Laboratory.	8
Mechanical Engineering, 5, 6, 20..... Metal-work; Engineering Drawing; Steam Engineering.	6

Senior Year.

	Units.
Chemistry, 6	1
Metallury.	
Civil Engineering, 5, 6	1
Surveying Instruments; Foundations.	
Contracts and Business Law	2
Electrical Engineering, 21, 22, 23, 24	10
Alternating Currents; Electrical Distribution; Electrical Applications; Electrical Engineering Laboratory.	
Mechanical Engineering, 7, 10, 23	5
Machine Design; Engineering Laboratory; Hydraulic Machinery.	

MECHANICAL ENGINEERING COURSE.

Sophomore Year.

	Units.
French or German	3
Graphics, 2, 8	5
Advanced Mechanical Drawing; Descriptive Geometry.	
Mathematics, 20, 22 or 21, 22	3
Calculus; Differential Equations.	
Mechanical Engineering, 1, 4	4
Mechanism; Shop-work.	
Physics, 1, 2	5
General Physics; Laboratory Physics.	

Junior Year.

Applied Mathematics, 20, 21, 22	6
Mechanics; Hydraulics; Mechanics of Materials.	
Civil Engineering, 22	2½
Theory of Structures.	
Mechanical Engineering, 5, 6, 9, 20	8
Metal-work; Engineering Drawing; Engineering Laboratory; Steam Engineering.	

Senior Year.

	Units.
Chemistry, 6 ..... Metallury.	1
Civil Engineering, 5, 6 ..... Surveying Instruments; Foundations.	1
Contracts and Business Law.....	2
Electrical Engineering, 7 ..... Dynamos and Motors.	3
Mechanical Engineering, 7, 10, 22, 23, 24, 25, 28..... Machine Design; Engineering Laboratory; Internal Combustion Motors; Hydraulic Machinery; Technical Machinery; Compression and Refrigeration Machinery; Industrial Management.	10

PRIZES.

Only candidates for degrees may compete for these prizes.

Ruggles Prizes.—The Ruggles Prizes, for excellence in Mathematics, founded by Professor William Ruggles, LL.D., consist of two gold medals, annually awarded upon examination to the best two scholars in Mathematics.

Munroe Prize.—Professor Munroe offers a gold medal to that student from any Washington high school or the Manual Training School who shall attain the highest mark in Chemistry among those passing the entrance examinations, and shall remain in regular attendance for one year.

Class of '96 James Macbride Sterrett, Jr., Memorial Medal.—This prize is annually awarded to that student taking Course 1 in Physics who obtains the highest average in a special examination on a given subject and in the writing of an essay on an assigned topic.

Davis Prizes.—The Davis Prizes, for excellence in Elocution, founded by the Hon. Isaac Davis, LL.D., of Massachusetts, consist of three gold medals, annually awarded to the successful competitors in a public contest. Members of the Senior Class are eligible to compete for these prizes.

Schmidt Prizes.—Mr. Fred. A. Schmidt offers a prize to the student who attains the highest standing in Descriptive Geometry, Trigonometry, and Analytic Geometry.

Muth Prize.—Geo. F. Muth & Co. offer a set of drawing instruments to the student taking Machine Drawing who makes the highest average record in that subject and in the previous year's Mechanical Drawing.

SCHOLARSHIPS.

Application for scholarships should be filed with the Dean not later than September fifteenth. All scholarships except the Kendall Scholarship and the University Scholarship are awarded for one year only, but they may be renewed. Any student holding a scholarship who fails to obtain a general average of 85 per cent on the work of any term or whose deportment is unsatisfactory will be reported to the President's Council, and in the absence of extenuating circumstances the scholarships will be revoked.

The Kendall Scholarship, the University Scholarships, and the Admiral Powell Scholarships are open to students in the College of Engineering. Detailed statements in regard to these scholarships are given on pages 51-52.

Henry Harding Carter Scholarships.—These scholarships, founded by Mrs. Maria M. Carter in memory of her husband, Henry Harding Carter, consist of four scholarships of the annual value of fifty dollars each, and may be awarded to deserving students who are preparing for the civil engineering profession.

IV. DIVISION OF ARCHITECTURE.

FACULTY.

Charles Willis Needham, LL.D.....President of the University
Percy Ash, B.S.....Professor of Architecture in charge of the Division of Architecture
James Howard Gore, Ph.D.....Professor of Mathematics
Howard Lincoln Hodgkins, Ph.D.....Professor of Physics
Charles E. Munroe, Ph.D.....Professor of Chemistry
Hermann Schoenfeld, Ph.D., LL.D.....Professor of German
Charles Clinton Swisher, Ph.D., LL.D.....Professor of History
William Allen Wilbur, A.M.....Professor of English
Mitchell Carroll, Ph.D.....Professor of Classical Philology
George N. Henning, A.M.....Professor of Romance Languages
Henry A. Pressey, Ph.D.....Professor of Civil Engineering
George Lansing Raymond, L.H.D.....Professor of Æsthetics
Albert Burnley Bibb.....Professor of Architecture
Edwin A. Hill, Ph.D.....Instructor in Chemistry
F. L. Molby.....Instructor in Freehand Drawing
Otis D. Swett, B.S.....Instructor in Chemistry
De Witt C. Croissant, A.M.....Instructor in English
Oscar L. Keith, A.M.....Instructor in Romance Languages
Paul N. Peck, A.M.....Instructor in Mathematics
Alfred F. W. Schmidt, A.M.....Instructor in German
Edwin V. Dunstan, B.S.....Instructor in Civil Engineering
Charles Mason Remey.....Instructor in Architecture
Edwin Smith, Jr.....Assistant in Chemistry
Hubert P. Illman.....Assistant in Architecture

ADMISSION.

Each applicant for admission is required to present a testimonial of good moral character, and also a certificate of standing and regular dismissal from the school or college which he has attended or from the tutor with whom he has studied.

Candidates for admission to the Freshman Class may present certificates of admission or take an examination in the required books and subjects.

The general requirement for admission is a four-year high school course, or its equivalent, consisting usually of four or five recitations per week in four or more topics.

Candidates for admission to the course leading to the degree of Bachelor of Science are required to present subjects from the list of high school studies aggregating fifteen units, distributed as follows:

	Units.
English	4
French or German	2
Elementary Algebra	1
Plane Geometry	1
Physics	1
Chemistry	1
Electives	5
	15

The list of high school studies and the definition of requirements in all preparatory subjects are given on pages 40-50 of this catalogue.

REQUIREMENTS FOR THE DEGREE OF BACHELOR OF SCIENCE IN ARCHITECTURE.

To be recommended for the degree of Bachelor of Science in Architecture the student must be registered in the Division of Architecture for at least one academic year, he must satisfy the admission requirements, and must complete the prescribed course for the degree. This is a four-year course. General culture studies are pursued through the first two years, about half of the time being devoted to them. The rest of the course is devoted to architectural work. The unit of credit is one hour of recitation or lecture per week throughout the academic year. Laboratory hours count one-third unit each.

First Year.

	Units.
English	3
Mathematics	3
French, Italian, or German	3
Chemistry	5
Architectural Drawing	3
Shades, Shadows, and Perspectives	2
Freehand Drawing	2
	21

Second Year.

English	3
Mathematics	3
French, Italian, or German	3
Physics	5
Rendering, Design	3
Freehand Drawing	2
History of Architecture	2
	21

Third Year.

	Units.
Mechanics of Material (First term)	3
Graphic Statics (Second term)	
Building Construction	2
Sanitary Engineering of Buildings	1
History of Architecture	2
Pen and Ink Rendering	2
Design and Sketch Design	4
Drawing from the Antique	1
Water Colors	2
	18

Fourth Year.

Design and Sketch Design—Thesis	5
Modeling (Architectural)	1
Pen and Ink Rendering	1
Classical Archæology	2
History of Painting and Sculpture	2
Building Construction	2
Drawing from Life	1
Water Colors	2
History of Architecture	2
Office practice	1
	19

A special course of three years may be arranged for qualified students who wish to take the purely technical work of the Architectural course. Special students to receive a certificate on the satisfactory completion of the special course as outlined below.

First Year.

	Units.
Architecture, 3	3
Shades and Shadows, 4	2
Construction, 21	2
Freehand, 2	2
Pen and Ink, 27	1
	10

Second Year.

	Units.
Architecture, 5	3
Construction, 33	2
History (Mediæval), 32	2
Freehand, 6	2
Water Colors, 34	2
	11

Third Year.

Architecture, 27	5
History (Renaissance), 23	2
History, Painting, and Sculpture, or Archæology, History, Classical Architecture	2
Office Practice, 36	1
	10

In addition, before the certificate will be awarded the student must show that he has satisfactorily completed courses 26, 35, and 39.

A fixed fee of $100 per year to be charged for this work.

PRIZES.

The Washington Architectural Club offers membership in the Club as a prize in Architecture. In 1903-04 this prize was awarded to Charles R. Lombard. In 1904-05 to W. H. I. Fleming. In 1905-06 to S. Peter Wagner.

The Architectural League of America offers an annual Traveling Scholarship in Architecture, value $1200 to students and draftsmen in Architecture under 35 years of age. All architectural students in the University, who are members of the George Washington University Architectural Club are eligible to compete for this prize.

The following prizes are open to students taking Beaux Arts problems:

PARIS PRIZE.

This prize, conducted by the Society of Beaux Arts Architects, gives to the winner, by authorization of the French Government, the privilege of following the lectures and of taking part in the competition of the first class in Architecture at the Ecole des Beaux Arts of Paris; he must, however, have already successfully pursued studies corresponding to those prescribed in the second class at that institution, for which condi-

tion he will be allowed six months to qualify. The winner, moreover, receives a stipend of two hundred and fifty dollars quarterly during his stay abroad, which should last two and one-half years.

Competitors must be under twenty-seven years of age.

WARREN PRIZE.

This consists of two prizes of fifty dollars and twenty-five dollars respectively for the most successful solution of a problem in planning.

PUPIN PRIZE.

Two prizes of fifty dollars and twenty-five dollars respectively are offered by Prof. PUPIN, of Columbia University, for the best designs for the ornamental treatment of some scientific appliance.

V. COLLEGE OF THE POLITICAL SCIENCES.

FACULTY.

Charles Willis Needham, LL.D.....President of the University
C. William A. Veditz, Ph.D., LL.B....Acting Dean and Professor of Economics
James Howard Gore, Ph.D.....Professor of Mathematics
Howard Lincoln Hodgkins, Ph.D.....Professor of Physics
John M. Harlan, LL.D....Professor of American Constitutional Law
David J. Brewer, LL.D.....Professor of International Law
James Macbride Sterrett, D.D.....Professor of Philosophy
Charles E. Munroe, Ph.D.....Professor of Chemistry
Hermann Schoenfeld, Ph.D.....Professor of German
Charles Clinton Swisher, Ph.D., LL.D.....Professor of History
William Allen Wilbur, A.M.....Professor of English
Mitchell Carroll, Ph.D.....Professor of Classical Philology
George N. Henning, A.M.....Professor of Romance Languages
Oscar P. Austin.....Professor of Commercial Geography
E. G. Lorenzen, Ph.B., LL.B., J.U.D....Professor of Commercial Law
Williston S. Hough, Ph.M.....Professor of Philosophy
George P. Merrill, Ph.D.....Professor of Geology and Mineralogy
Paul Bartsch, Ph.D.....Professor of Zoölogy
Albert Mann, Ph.D.....Professor of Botany
James Brown Scott, A.M., J.U.D....Professor of International Law and Diplomacy
John W. Holcombe, M.Dip.....Assistant Professor of Politics
John W. Foster, LL.D.....Lecturer on American Diplomacy
James C. Monaghan, A.M.....Lecturer on the Consular Service
Otis D. Swett, B.S., LL.M.....Secretary

GENERAL STATEMENT.

The College of the Political Sciences will open in the fall of 1907. It is the outcome of what has previously been known as the Department of Politics and Diplomacy, founded in 1898 in close affiliation with the law school of the University. Up to the present time this Department has constituted a graduate and strictly professional branch of the University. Hereafter, however, it will constitute a separate and independent college, offering both undergraduate and graduate courses. The graduate courses, so far as they are of a general character, will in accordance with the system prevailing throughout the University be in charge of the Faculty of Graduate Studies. So far as they are of a professional character, they will be under the direction of the

Faculty of this College, which will also have complete control over the undergraduate courses of study here offered.

The purpose of the new College is broader than that of the Department of Politics and Diplomacy, although, like the latter, it is also designed to fit men for the public service, particularly for the consular and diplomatic services, and to supply that knowledge of the public life of this country and of foreign countries which will be of most value to journalists, teachers, and other persons aiming to become moulders of public opinion upon the national and international issues of the day. In addition, the new College will offer systematic courses in preparation for higher business careers and for social reform work, and collegiate training of a general cultural character suitable as an introduction to professional training in law.

ADMISSION.

For admission to the College of the Political Sciences the applicant must have had the usual high school training or its equivalent, and he must have received credit for fifteen units of college preparatory work—a unit representing four or five recitations per week for one school year. These fifteen units must include at least four units of English, two units of mathematics, two units of foreign language, and one unit of history, geography or civics. The remaining six units may consist of such other subjects as the student may elect to offer for admission.

GRADUATION AND DEGREES.

Before the student can graduate from this College, he must receive credit for the successful completion, at this University or at other institutions of recognized standing, of sixty units of work of collegiate grade. A unit represents substantially one hour's class-room work throughout a whole academic year. Hence the student taking fifteen hours work per week may complete the course in four years; while by taking more than fifteen hours per week, which can be done only with the express approval of the Dean and under certain conditions, he may shorten by one half-year, or conceivably by a whole year, the period of study requisite for graduation. The degree conferred upon all students for the satisfactory completion of the required amount of undergraduate work is that of Bachelor of Arts.

Two graduate degrees will be conferred for work along lines represented by the College of the Political Sciences—the degree of Master of Arts, and the degree of Master of Diplomacy. The requirements for the Master of Arts degree are precisely similar to those prevailing in the other colleges of the George Washington University, and are determined by the Faculty of Graduate Studies. The degree of Master of Diplomacy, however, is a professional degree,

involving at least one year of graduate study, conferred only upon such students as elect for their major subject international law and diplomacy, and who possess a knowledge of two modern languages of which one must be French.

ARRANGEMENT OF COURSES.

All undergraduate students in this College are required to offer as part of the sixty units requisite for graduation at least three units in English, three units in science or mathematics, three units in modern languages, three units in philosophy, and three units in history or economics. Moreover, at the beginning of his undergraduate work, each student will be required to elect one of several "groups" of studies, designed to fit him especially for the career which he has in mind. For the present, these groups are designated as follows:

The Diplomatic Group.

The Consular Group.

The Law and Administration Group.

The Journalistic Group.

The Finance and Commerce Group.

The History and Economics Group.

Each of these groups contains courses of required study aggregating approximately twenty-five units of work. Thus each student, regardless of the group he elects, must take the fifteen units of absolutely required work, and in addition twenty-five units of work the character of which depends upon the group that he has chosen, leaving a margin of twenty units for the free and unrestricted selection of such studies as the student may care to pursue. It is provided, however, that in the choice of these free electives the student shall not be allowed to scatter his energies by undertaking too great a variety of courses, or, on the other hand, to attempt too narrow a specialization.

Students who have carried on collegiate work in other universities or colleges of recognized standing, and who have received credit from such institutions for the successful completion of work there carried on, will be admitted to advanced standing in the College of the Political Sciences in accordance with the amount of work already accomplished. No student, however, can receive a degree for work in the College of the Political Sciences at this University for less than one year's residence in this College, no matter how much work he may have accomplished successfully elsewhere.

Graduates from other colleges and universities of recognized rank may be admitted to graduate courses in this College and become candidates for graduate degrees at this University, provided they furnish

evidence that the nature of their undergraduate work has been such as to fit them for the successful pursuit of the graduate studies which they intend to carry on.

Inasmuch as several additions are about to be made to the Faculty of the College of the Political Sciences and the plan of studies has not been completely elaborated, the University will soon publish a separate statement regarding the work and organization of this College. This statement will be mailed upon application to all persons addressing the Registrar of the University. Inquiries for specific information may be addressed to the Acting Dean of this College.

VI. DIVISION OF EDUCATION.

FACULTY.

CHARLES WILLIS NEEDHAM, LL.D.....PRESIDENT OF THE UNIVERSITY
WILLISTON S. HOUGH, Ph.M.....Professor of Philosophy iu Charge of the Division of Education
JAMES HOWARD GORE, Ph.D.....Professor of Mathematics
HOWARD LINCOLN HODGKINS, Ph.D.....Professor of Physics
JAMES MACBRIDE STERRETT, A.M., D.D.....Professor of Philosophy
CHARLES E. MUNROE, Ph.D.....Professor of Chemistry
HERMANN SCHOENFELD, Ph.D., LL.D.....Professor of German
CHARLES CLINTON SWISHER, Ph.D., LL.D.....Professor of History
WILLIAM ALLEN WILBUR, A.M.....Professor of English
MITCHELL CARROLL, Ph.D.....Professor of Classical Philology
GEORGE N. HENNING, A.M.....Professor of Romance Languages
PERCY ASH, C.E.....Professor of Architecture
C. WILLIAM A. VEDITZ, Ph.D., LL.B.....Professor of Economics
GEORGE P. MERRILL, Ph.D.....Professor of Geology and Mineralogy
PAUL BARTSCH, Ph.D.....Professor of Zoölogy
GEORGE LANSING RAYMOND, L.H.D.....Professor of Æsthetics
ALBERT MANN, Ph.D.....Professor of Botany
*_____.....Instructor in Education
ELMER ELLSWORTH BROWN, Ph.D.....Lecturer
WILLIAM ESTABROOK CHANCELLOR, Ph.D.....Lecturer
GEORGE E. MYERS, Ph.D.....Lecturer
WILLARD S. SMALL, Ph.D.....Lecturer
WILLIAM W. BLACK, A.M.....Lecturer
STEPHEN ELLIOTT KRAMER, B.S.....Lecturer
OTIS D. SWETT, B.S.....Secretary

ADMISSION.

Applicants for admission as regular students must comply with the entrance requirements either for the Bachelor of Arts or for the Bachelor of Science Course in Columbian College (see pp. 37 and 38). But persons desirous of taking one or more of the professional courses, without becoming candidates for a degree, may be admitted as special students on the presentation of satisfactory evidence that they are qualified to pursue the work to advantage. Students already matriculated in Columbian College may be admitted to the Teachers' Course, but not later than the beginning of their Junior year, unless by vote of the Faculty they be admitted at a subsequent period.

* To be appointed.

THE TEACHERS COURSE.

The Teachers Course is designed to provide instruction in pedagogical science, and also professional training for the vocation of teaching and of school administration.

To be recommended for a Bachelor's degree in Arts or Science and a Teacher's Diploma, the student must complete courses of study aggregating at least sixty units. Thirty of these units are prescribed studies and thirty are electives. The prescribed studies are the following: (A) Either, in addition to the prescribed studies for the Bachelor of Arts Course, three units in Science and three units in History; or, in addition to the prescribed studies for the Bachelor of Science Course, three units in History and three units in Philosophy; (B) nine units in Education (see "Education" under University Subjects, p. 91). Electives should be chosen with direct reference to the subjects which the student wishes to teach.

THE TEACHER'S DIPLOMA.

The Teacher's Diploma is granted in connection with either the Bachelor of Arts or the Bachelor of Science degree, upon the fulfillment of the following conditions: (a) the student must have satisfactorily completed the courses of study defined in the preceding paragraph; (b) he must, in the judgment of his instructors, also possess other qualifications essential to success in teaching.

The Diploma is also given in connection with higher degrees, provided a graduate student has taken a major or minor in Education, and has also satisfied the requirements *a* and *b* above, or, in lieu of *a*, has completed an equivalent amount of pedagogical work in another institution.

TEACHERS APPOINTMENT BUREAU.

The Division of Education maintains a Teachers Appointment Bureau for the purpose of aiding students who are studying, or have studied, in the Teachers Course, or in Columbian College, to secure positions as teachers. This service is performed gratuitously, in the interest both of students and of superintendents of schools and boards of education wishing to employ teachers. Communications should be addressed to the "Teachers Appointment Bureau," The George Washington University.

Department of Arts and Sciences.

COURSES OF INSTRUCTION.

UNIVERSITY SUBJECTS.

University Subjects are divided into three sections, in accordance with the following requirement of an ordinance adopted by the Board of Trustees, October 12, 1902:

ARTICLE IV.—*Development of University Subjects.*

SECTION 1. Subjects shall be divided into three sections, as follows:

(1) The fundamental section, covering two years' work; this section to be assigned to students in the general-culture courses.

(2) The advanced section, not exceeding three years; this section to be assigned to students specializing for literary, scientific, professional, or industrial pursuits.

(3) The original research section; this section to be assigned to students pursuing a subject for discovery and broader culture.

The courses in the first section may sometimes be recommended to graduate students, but are not ordinarily counted toward the higher degrees. The courses in the second section are in general for advanced students, candidates for the Bachelor's degree; they serve, however, with additional work as minors for the higher degrees, provided they have not already counted toward a degree. They may be taken by students in the second year of their course only by special permission of the professor in charge. The courses in the third section are in general for graduate students only, candidates for one or other of the higher degrees. They are open to undergraduates only on the recommendation of the instructors, and no undergraduate student shall take in one year more than one course in the third section. When an announced course has not been applied for by at least three students, candidates for a degree, the instructor may withdraw the course. First-section courses are numbered 1 to 19, inclusive; second-section courses from 20 to 39, inclusive; third-section courses are numbered on from 40. The number of hours, unless otherwise specified, indicates hours per week throughout the year. The unit of credit is one hour of recitation or lecture work per week for one academic year; laboratory hours in Chemistry and Architecture count one-third unit each, in other subjects one-half unit each. Sixty units of credit is the minimum requirement for the Bachelor's degree. Laboratories and drawing-rooms will be open from

9.30 a. m. till 10 p. m., with competent assistants in charge to direct students. No student is admitted to a course unless he fulfills all of the preliminary requirements for that course, or otherwise satisfies the instructor that he is prepared to pursue it. Every student must make his election of courses so as to avoid conflict between the hours appointed for recitations.

ANATOMY.

D. KERFOOT SHUTE, A.B., M.D.....*Professor*

Third Section. Primarily for Graduates.

40. ANATOMY OF THE NERVOUS SYSTEM.—This course includes laboratory work, readings, and recitations. The nervous system is investigated in typical animals of the different classes, especially with the view of gaining some insight into the phylogeny of the central nervous system in man. The growth of the brain and its physical characters as related to intelligence are investigated. The histology and embryology of the central nervous system and the sense organs are studied. A history of the guiding conceptions in neurology is to be acquired. The course is designed to inculcate students of anatomy, medicine, and psychology with a sound knowledge of the architecture and functions of the nervous system of man. Two hours. Professor SHUTE.

APPLIED MATHEMATICS.

EDWIN V. DUNSTAN, C.E.....*Instructor*
OSCAR A. MECHLIN, C.E.....*Instructor*

Second Section. For Undergraduates and Graduates.

20. Analytical and Applied Mechanics. (1) Statics: including the composition, resolution, and equilibrium of forces; center of gravity; friction; machines. (2) Kinematics and Kinetics: including rectilinear and curvilinear motion; motion under action of variable forces and in resisting media; constrained and rotatory motion; impact; work and energy; moment of inertia. Four hours a week during the first term.

21. Hydraulics. The theoretical principles of hydraulics, including hydrostatics, flow through orifices, over weirs, through pipes and in open channels, and the dynamic pressure of water. Experiments in connection with this course are made in the Engineering Laboratory. Four hours a week during the second term.

22. Mechanics of Materials and Theory of Elasticity, including elastic and ultimate strength and deformation; simple, cantilever and continuous beams; columns, torsion; combined stresses; compound columns and beams, including reinforced concrete; resilience; work; fatigue; mathematical theory of elasticity. Four hours a week during the second term.

ARCHÆOLOGY, CLASSICAL.

MITCHELL CARROLL, Ph.D. ..... *Professor*
CHARLES B. NEWCOMER, Ph.D. ..... *Instructor*

Second Section. For Undergraduates and Graduates.

The following cycle of courses in Classical Archæology is given, extending over a period of three years. Each course consists of weekly lectures and conferences illustrated by maps, plans, photographs, and lantern slides, supplemented by a prescribed course of reading and the preparation of papers on special topics. The work constitutes a two-hour elective, or either the lectures on Mondays or the class conferences on Thursdays may be taken as a one-hour elective. A knowledge of Greek or Latin is not essential.

20. Topography and Monuments of (*a*) Athens and (*b*) Rome. A study of the history, topography, and monuments of the chief centers of ancient life. Given in 1906-07. *Mon., Th.,* at 4.50. Professor CARROLL, Dr. NEWCOMER.

21. Life of the Greeks and Romans. Selected topics in Private and Public Life. Given in 1905-06. *Mon., Th.,* at 4.50.

22. Greek and Roman Architecture and Sculpture. Given in 1907-08. Professor CARROLL.

In all these courses considerable use is made of the illustrative material accessible in the Library of Congress, the Corcoran Gallery of Art, and the Smithsonian Institution.

ARCHITECTURE.

PERCY ASH, B.S. ..... *Professor in charge*
ALBERT BURNLEY BIBB ..... *Professor*
CHAS. MASON REMEY ..... *Instructor*
FRANK L. MOLBY ..... *Instructor in Freehand Drawing*
HUBERT P. ILLMAN ..... *Assistant*

Criticisms in design are regularly given by practicing architects, in addition to the regular corps of instructors.

Instruction in drawing from the antique and from life is given at the Corcoran Gallery of Art by Mr. Brooke, Miss Mueden, and Mr. Messer.

First Section. Primarily for Undergraduates.

1. Freehand Drawing. This course consists of drawing, in charcoal, of cubes, cones, etc. *Mon., Sat.,* at 5.40. Mr. MOLBY.

2. Freehand Drawing. For architectural students primarily. This course begins with drawing, in charcoal, of cubes, cones, etc., and is followed by a series of drawings from architectural casts. *Mon., Sat.,* at 4.50. Mr. MOLBY.

3. Architectural Drawing and Elementary Design. This course includes the study of the Five Orders of Architecture, the use of India ink, and water-color rendering. Lectures on the Five Orders on Tuesday, at 4.50 and instruction in the use of color and rendering in India ink on Thursday, at 4.50, and at least ten additional hours in the drafting-room. Professor ASH.

4. Shades, Shadows, and Perspectives. A course in orthographic projections, shades, shadows, and perspectives. *Wed., Fri.,* at 4.50. Mr. REMEY.

5. Rendering and Design. In this course the instructions in India ink rendering and the use of water colors given in the first year are continued. At least twelve hours each week are devoted to the problems in design. Six regular problems and five sketch problems constitute the course in design. Criticism, by Professor ASH and Mr. REMEY.

6. Freehand Drawing. The drawing from architectural casts in both charcoal and pencil continues the work begun in the first year, and is intended to fit the student for his subsequent freehand drawing from the antique. *Mon., Sat.,* at 4.50, and at least two additional hours. Mr. MOLBY.

7. History of Art. A course in the history of sculpture, architecture, and painting. Open only to women. *Mon., Wed., Fri.,* at 2.30. Miss ELLIS.

Second Section. For Graduates and Undergraduates.

20. History of Architecture. History of Classical and Early Christian architecture. Illustrated. Two lectures per week. *Tues., Thurs.,* at 4.50. Professor BIBB.

21. Building Construction. Frame construction and interior finish. *Wed., Fri.,* at 5.40. Professor ASH.

22. Sanitary Engineering of Buildings. One hour.

23. History of Architecture. History of Renaissance architecture. Illustrated. Two lectures per week, and one additional hour for research. *Mon., Fri.,* at 4.50. Professor ASH.

24. Pen and Ink Rendering. A study of the works of the best draftsmen, with practice in the use of the pen as a means of architectural expression. Two hours. Professor ASH.

25. Design and Sketch Design. This course embraces problems in plan, in archæology, and in sketch design. Three problems in archæology, three plan problems, and five sketch problems constitute the course. The student is required to spend at least sixteen hours in the drafting-room each week. Criticism, by Professor ASH and Mr. REMEY.

26. Drawing from the Antique. To be eligible for this course the student must have passed satisfactorily Course 6. He is required to devote at least four hours per week to working from the antique in the Corcoran Gallery of Art.

27. Design and Sketch Design. Thesis. Problems of an advanced character are assigned to the student during the first term. Three advanced problems and three sketch problems are required of the student in addition to his thesis. The three months preceding graduation are devoted to the production of the thesis designs, the subject for the thesis being selected by the student. The student is required to spend twenty hours each week in the drafting-rooms. Criticism is given three times a week by Professor ASH and Mr. REMEY.

28. Modeling (Architectural). This course will be arranged and an instructor appointed at an early date.

29. Pen-and-ink Rendering, being a continuation of the work begun in the third year. The work consists largely of the making of pen-and-ink drawings from photographs of architectural subjects. Two hours per week are devoted to this work.

30. Classical Archæology. *Mon.,* and *Thurs.,* at 4.50. Professor CARROLL. (See Section on Archæology.)

31. History of Painting and Sculpture. This course will comprise a series of illustrated lectures on painting and sculpture. The details of the course will be given later.

32. History of Mediæval Architecture. Two lectures and one hour for research per week. Professor BIBB.

33. Building Construction. Masonry, cements, foundations, soils, etc. *Mon.,* at 5.40, *Wed.,* at 4.50. Professor ASH.

34. Water Colors. Two hours per week. Professor BIBB.

35. Drawing from Life. Six hours per week at the Corcoran Gallery of Art.

36. Office Practice. A course of practical planning and detailing. Four hours per week. Professor ASH.

37. A special course in design will be given, consisting of six regular and five sketch problems. This course is intended to prepare students for the Beaux Arts problems. Criticisms, by Professor ASH and Mr. REMEY.

38. In this course the problems prepared by the New York Society of Beaux Arts Architects will be offered to the students, and the judgments will be made by the jury in New York City under the rules of the society. Criticisms, by Professor ASH and Mr. REMEY.

39. Summer Work. Each architectural student is required during the summer vacation to make at least twenty-four sketches from nature, or

to do an equivalent amount of work, namely, four weeks in an architect's office, or the measured drawings of an existing monument of architecture.

Third Section. Primarily for Graduates.

40. Composition as applied to architecture.

41. Advanced design.

Offer: A special course in Architecture, extending through three years, for which a certificate will be issued.

ASTRONOMY.

EDGAR FRISBY, A.M.....*Professor*
HERBERT LOUIS RICE, M.S.....*Professor*
ASAPH HALL, JR., Ph.D.....*Professor*

Third Section. Primarily for Graduates.

40. The Theory of Computing the Orbits of Comets. Encke's Memoir on Olbers' Method, Abhandlungen, Erster Band. Gauss' Theoria Motûs. Books of reference: Watson's Astronomy, Oppolzer's Bahnbestimmung der Cometen und Planeten. Professor FRISBY.

41. The Theory of General Peturbations. Tisserand, Méchanique Céleste. Books of reference: Laplace, Méchanique Céleste; Lagrange, Méchanique Analytique, and Memoirs; Leverrier, Annals of the Paris Observatory; Hansen, Auseinandersetzung; Pontécoulant, Systéme du Monde, etc. Professor FRISBY.

42. On the Theory and Practice of Interpolation. A special course, including a full discussion of the properties of differences, the various formulæ and methods of interpolation, tabular differentiation, and mechanical quadrature; also other important problems concerned, with the tabular values of functions, for those desiring special acquaintance with this fundamental and important subject. Professor RICE.

43. Celestial Mechanics. Theory of central forces; theory of parabolic and elliptic orbits. Lectures with reading from the works of Gauss, Oppolzer and Moulton. Professor HALL.

ASTRO-PHYSICS.

FRANK HAGAR BIGELOW, A.M., L.H.D.....*Professor*
FREDERICK E. FOWLE, JR.....*Lecturer*

Third Section. Primarily for Graduates.

40. Solar Physics. The constitution of the sun, the sun-spots, faculæ, prominences, and the coronas; the circulation of the solar mass and the distribution of these phenomena in latitude and longitude, their

variations in the 3-year, 11-year, and 35-year periods; the grounds for the theory that the sun is a magnetized body, associated with electric currents and an ionized radiation. Professor BIGELOW.

41. Cosmical Electricity and Magnetism. The two fields of force emanating from the sun, their modes of propagation through the ether as electromagnetic and magnetic types of energy, and their relation to the heat and light received by the earth; the laws of radiation and the determination of the solar constant; the variations in the solar spectrum due to changes in the physical states of the sun's and the earth's atmospheres. Authors: Maxwell, Poincaré, J. J. Thompson, Hertz, Heaviside, Webster, with references to the recent literature in scientific journals. Professor BIGELOW.

42. Terrestrial Magnetism. The distribution and secular variation of the magnetism of the earth, its periodic and irregular disturbances by solar action; magnetic observatories, instruments, and methods of observing; atmospheric electricity and ionization; terrestrial radioactivity and emanations; auroras, magnetic storms, and their relation to the gases of the atmosphere, with a history of the progress of science in these lines of research; the work of the Mount Weather Meteorological Research Observatory in connection with solar physics. Authors: Gauss, Mascart, Stewart, and Gee; numerous reports of observatories and recent scientific papers. Professor BIGELOW.

43. Meteorology. The theories of the general motions of the earth's atmosphere and of the generation of local cyclones and anti-cyclones, periodic variations in the pressure, temperature and precipitation of the atmosphere due to solar operations; short and long range predictions of the weather for the United States.

The results of the International Cloud Survey of 1896-1897; of the Weather Bureau nephoscope observatories in the West Indies, 1898-1902; a comparative study of the theories of dynamic meteorology; Bigelow's standard system of equations useful in meteorology; the gradients of pressure, temperature, and vapor tension as determined by cloud observations, balloon and kite ascensions; the barometry and thermometry of the United States; eclipse meteorology and allied problems; the new cosmical meteorology; these and related topics are included in this course. Professor BIGELOW.

44. A lecture course on the astro-physical instruments employed in modern research; the siderostat, the coelostat, the bolometer, the spectroheliograph, spectroscopes and telescopes generally, explaining their mechanical parts, the methods of obtaining the instrumental errors, and the formulæ for reducing the observations. To be taken in connection with Courses 40 and 41. Mr. FOWLE.

BACTERIOLOGY AND PATHOLOGY.

JAMES CARROLL, M.D.....*Professor*

Third Section. Primarily for Graduates.

40. Bacteriology. Special studies and practical research work. Professor CARROLL.

BOTANY.

ALBERT MANN, A.M., Ph.D.....*Professor*

First Section. Primarily for Undergraduates.

1. General Plant Morphology and systematic relationships between higher and lower forms as to structure and organs. First half year.

General Plant Physiology, especially of the higher plants. Second half year. Lectures, *Tu.*, at 4.50. Laboratory work, *Th.*, 4.50 to 6.30.

2. Biological Botany; Ecology, the relation of plants to each other and to their environment; Geographical Botany and the distribution of plants. First half year.

Paleontological Botany; Comparative Morphology of Plants in relation to origin and to the classification of existing plants. Second half year. Lectures, *Tu.*, at 5.40. Laboratory work, *Sat.*, 4.50 to 6.30.

Second Section. For Undergraduates and Graduates.

20. Comparative Biology. This course consists of lectures and classroom demonstrations treating of the different functions and phenomena of life as they are exhibited in both animals and plants. The lectures are given by the Professor of Zoölogy and the Professor of Botany alternately. *Wed.*, at 4.50. Professors BARTSCH and MANN.

21. Plant Histology; studies in general cell structure and in Comparative Embryology. First half year.

Higher Plant Physiology; modifications in structure by natural and artificial means; cultivated plants. Second half year. Lecture, one hour. Laboratory, two hours.

Third Section. Primarily for Graduates.

40. Original investigations in (*a*) Economic Botany, Materia Medica, etc.; (*b*) Parasitism and Monstrosities; (*c*) Researches in Physiology of single groups; (*d*) Comparative Organography.

CHEMISTRY.

CHARLES E. MUNROE, Ph.D.....*Professor*
FRANK WIGGLESWORTH CLARKE, Sc.D..*Professor of Mineral Chemistry*
HARVEY W. WILEY, Ph.D., M.D....*Professor of Agricultural Chemistry*
EDWARD G. SEIBERT, M.D.....*Assistant Professor*

N. Monroe Hopkins, Ph.D.....*Assistant Professor*
Edwin A. Hill, Ph.D.....*Assistant Professor*
Thomas M. Price, Ph.D.....*Assistant Professor*
Otis D. Swett, B.S.....*Instructor*
Elmer S. Newton, B.A., M.D.....*Instructor*
Walter O. Snelling, M.S.....*Instructor*
William E. Hillyer, M.S.....*Assistant*
Edwin Smith, Jr., B.S.....*Assistant in Assaying*
Albert P. Clark, Phar.D.....*Assistant*
John P. Frey.....*Assistant*
Robson De S. Brown.....*Assistant*

First Section. Primarily for Undergraduates.

1. General Chemistry. A series of illustrated lectures, accompanied by recitations and exercises, on theoretical, inorganic, organic, and technical chemistry. *Tu., Th., Sat.,* at 4.50. Professor Munroe, Mr. Swett.

2. Laboratory Practice. A laboratory course for the study of the principles of chemistry and the methods of conducting chemical experiments. Two three-hour periods. *Tu., Th.,* at 1.30. Professor Munroe, Dr. Hill, Mr. Snelling, Mr. Hillyer, Mr. Brown.

3. Preparation and Study of the Properties of Chemical Substances. A laboratory course. Two three-hour periods. *Tu., Th.,* at 1.30. Professor Munroe, Dr. Price, Mr. Snelling, Mr. Hillyer, Mr. Brown.

4. Assaying and Metallurgy of the Precious Metals, carried on by the methods used by the Government assayers, the laboratory being fitted up on the plan of that of the United States Mint. Twelve hours, for three months. Professor Munroe, Mr. Smith.

5. Lectures on the Principles of Analysis. One hour. Professor Munroe.

6. Metallurgy of Iron and Steel. A course of lectures and readings. *Tu.,* at 5.40. Professor Munroe.

7. Qualitative Analysis. A brief course intended primarily for students in engineering. Two three-hour periods. Professor Munroe, Dr. Price, Mr. Snelling, Mr. Smith.

Second Section. For Undergraduates and Graduates.

20. Qualitative Analysis. A laboratory course in the study of the properties and reactions of chemical substances, and of the means employed for their detection and identification. Three three-hour periods. Professor Munroe, Dr. Price, Mr. Snelling, Mr. Smith.

21. Quantitative Analysis. A laboratory course in the quantitative estimation of the constituents of a specially selected and typical set of chemical substances, which are particularly adapted for teaching the

student the aims and methods of quantitative chemical analysis and for imparting facility in manipulation. Four three-hour periods. Professor MUNROE, Dr. PRICE.

22. Technical Analysis and Industrial Processes. A lecture and laboratory course in which the elements of chemical engineering are taught, and special attention is given to rapid commercial methods of analysis. Four three-hour periods. Professor MUNROE.

23. Advanced course in Organic Chemistry. *Wed., Fri.,* at 4.50. Professor MUNROE, Mr. SWETT.

24. Advanced course in Organic Chemistry. A continuation of Course 23. *Th., Sat.,* at 5.40. Professor MUNROE, Mr. SWETT.

25. Chemistry of the Carbon Compounds. A laboratory course in the preparation and study of the properties of a characteristic series of organic compounds. Four three-hour periods. Professor MUNROE, Dr. PRICE, Mr. SWETT.

27. Stereo-chemistry. This course deals with the arrangements of atoms in space from a theoretical standpoint, while the student is taught how to form models by which to illustrate their arrangements. Two hours. Assistant Professor HILL.

28. Biochemistry. A laboratory course in the chemical examination of some of the chief foodstuffs, the tissues and fluids of the body, and the products of certain organisms; also the isolation of the digestive enzymes and a study of their action *in vitro.* Three three-hour periods Assistant Professor PRICE.

29. Organic Chemistry. Especially designed for students in medicine and dentistry. Two hours for one term. Professor MUNROE.

30. Physiological Chemistry. A series of lectures and recitations on the proximate principles of the human body. Two hours for one term. Assistant Professor SEIBERT.

31. Clinical Analysis. A laboratory course to accompany 29. Professor MUNROE, Assistant Professor SEIBERT, Dr. CLARK, and Mr. FREY.

34. Volumetric Analysis. Especially designed for students in medicine. Professor MUNROE and Dr. NEWTON.

Third Section. Primarily for Graduates.

40. Explosive Substances. Professor MUNROE.

41. Analytical Methods. Professor MUNROE.

42. The Phenomena of Deliquescence and Efflorescence. Professor MUNROE.

43. Development of the Theory of the Constitution of the Natural Silicates. Professor CLARKE.

44. Special Researches in Agricultural Chemistry. Professor WILEY.

45. Special Researches in Electro-chemistry. Assistant Professor HOPKINS.

Students in Chemistry are invited to attend the meetings of the Chemical Society of Washington. These meetings are held on the second Thursday of each month from October to May, in the Assembly Hall of the Cosmos Club, at 8 p. m.

CIVIL ENGINEERING.

HENRY A. PRESSEY, Ph.D.....*Professor*
EDWIN V. DUNSTAN, C.E.....*Instructor*
OSCAR A. MECHLIN, C.E.....*Instructor*

First Section. Primarily for Undergraduates.

1. Surveying and Mapping. This course includes the theory and use of instruments; land, topographic, hydrographic, mining, city, and geodetic surveying; measurement of volumes, projection of maps, etc. Text-book, Johnson's Surveying. Two hours a week. Field work, not less than 60 hours during the session, usually on Saturday morning.

2. Railroad Engineering. Railroad curves and earthwork; location of about two miles of railroad, including reconnaissance, preliminary and final locations, construction of contour maps and profiles, computation of earthwork, design of culverts, etc.; laying out curves; track work, etc. Two hours a week. Field work not less than 60 hours during the session.

3. Highways and Pavements. Location of highways; construction, improvement and maintenance of roads and pavements; curbs, gutters, sidewalks. One lecture and one design period during the first term.

4. Materials of Construction. A study of the properties of stone, brick, cement, concrete, wood, iron, steel, etc., with reference to processes of manufacture. The course is supplemented by a number of practical tests made by the students. Two lectures for first term and one lecture and one laboratory period for second term.

5. Surveying Instruments. A two months' course for Mechanical and Electrical Engineering students, covering the use of the compass, transit, and level. Lectures and field exercises, two hours per week.

6. Foundations. A two months' course for Mechanical and Electrical Engineering students, covering the general principles of foundation contruction and the materials used. Two hours a week.

7. Engineering Laboratory. Experimental work in connection with Applied Mathematics, 21, 22; Civil Engineering, 22, 24, and Mechanical Engineering, 23. One laboratory period per week for the second term.

Second Section. For Undergraduates and Graduates.

20. Masonry Construction. A course in the use of cement, brick, stone, and concrete, the design of foundations, retaining walls, dams, bridge piers and arches. Included in this is a short course in stereotomy. Two lectures and two design periods per week.

21. Hydraulic Engineering. The design and construction of water power plants and irrigation works. Flow of rivers; rainfall and runoff; methods of development; hydraulic motors; power transmission. Irrigation plans; distributing systems; water rights and irrigation law. Two lectures and one design period per week.

22. Theory of Structures. A course covering the determination of stresses in framed structures by graphical and by analytical methods. The first term is devoted to beams and roof trusses; the second to bridge trusses under uniform and wheel loads. Three lectures and two design periods per week.

23. Theory of Structures. The theory of steel design; the design of a roof truss, of a plate girder and a pin connected bridge truss and a study of the theory and design of suspension, continuous, cantilever, and arch bridges, and the details of steel mill and office buildings construction. Three lectures and two design periods per week.

24. Sanitary Engineering. This course treats of the drainage of buildings and lands, the treatment and disposal of sewage and the sewerage of cities and towns: public water supply and methods of water purification. Three lectures and one design period per week.

Third Section. Primarily for Graduates.

40. Advanced Masonry. A course in the theory and design of reinforced concrete structures.

41. Advanced Masonry. The theory of retaining walls and arches.

42. Testing of Materials. This course involves original research upon assigned topics.

43. Water Power Development. A comparative study of the principal water power developments of the United States and Europe. The course consists largely of assigned readings and reports thereon.

CLASSICAL LANGUAGES AND LITERATURES.

MITCHELL CARROLL, Ph.D. ..... *Professor*
CHARLES SIDNEY SMITH, Ph.D. ..... *Assistant Professor*
CHARLES B. NEWCOMER, Ph.D. ..... *Instructor*

GREEK.

First Section. Primarily for Undergraduates.

1. Lysias (selected orations); Herodotus (selections); Euripides (Alcestis); Greek prose composition. *Mon., Wed., Fri.,* at 2.30. Assistant Professor SMITH.

2. Thucydides (Book VII); Sophocles (Antigone); Xenophon (Memorabilia). *Mon.,* at 11.30; *Wed.,* at 11; *Fri.,* at 11.30. Professor CARROLL and Dr. NEWCOMER.

3. Elementary Course. For students who have not taken Greek before matriculating. It aims to cover as much as possible of the entrance requirements in Greek. With private study during the summer the student may be able to take up Course 1 at the beginning of the following year with condition on Homer. Three hours. Assistant Professor SMITH.

Second Section. For Undergraduates and Graduates.

20. Plato (selections); Aristophanes (Clouds); Aeschylus (Prometheus). *Tu., Th.,* at 9.30. Given in 1906-07. Not given in 1907-08. Professor CARROLL and Dr. NEWCOMER.

21. Greek Literary Criticism: Aristotle (Art of Poetry); Aristophanes (Frogs); Greek Lyric Poetry (selections); Conferences on History of Greek Literature. *Tu., Th.,* at 9.30. Given in 1907-08. Professor CARROLL.

22. Greek Prose Composition (advanced course): Practical exercises in syntax and translation. *Th.,* at 11.30. Professor CARROLL.

23. Homer: Rapid reading of the Odyssey. One hour. *Fri.,* at 4.50. Assistant Professor SMITH.

24. Lucian (selections). For rapid reading. *Th.,* at 3.30. Given in 1906-07. Not given in 1907-08. Dr. NEWCOMER.

LATIN.

First Section. Primarily for Undergraduates.

1. Livy (Books I, XXI); Cicero (De Senectute); Horace (Odes and Epodes); Latin prose composition. *Mon., Wed., Fri.,* at 1.30. Assistant Professor SMITH.

2. Cicero and Pliny (selected letters); Satires and Epistles of Horace; Ovid (selections); Martial (selections). *Mon., Wed., Fri.,* at 3.30. Professor CARROLL and Assistant Professor SMITH.

Second Section. For Undergraduates and Graduates.

20. Tacitus (selections); Vergil (Bucolics); Lucretius, *Tu., Th.,* at 10.30. Given in 1906-07. Not given in 1907-08. Professor CARROLL and Dr. NEWCOMER.

21. Roman Literary Criticism: Quintilian (Book X) and Horace (Ars Poetica); Catullus, Tibullus, and Propertius; Conferences on History of Roman Literature. *Tu., Th.,* at 10.30. Not given in 1906-07. Given in 1907-08.

22. Latin Composition and Reading at Sight: Practice in Latin expression and style. *Tu.,* at 1.30. Assistant Professor SMITH.

23. Plautus and Terence. *Th.,* at 1.30. Assistant Professor SMITH.

24. Cicero's Orations. A course for advanced students who expect to be teachers. Given in 1906-07. Not given in 1907-08. Two hours. Professor CARROLL and Dr. NEWCOMER.

25. Cæsar's Gallic and Civil Wars. A course for advanced students who expect to be teachers. Given in 1907-08. Professor CARROLL.

NOTE.—Students in Greek and Latin are recommended to take as electives the following courses in Classical Archæology:

20. Topography and Monuments of (*a*) Athens and (*b*) Rome. *Mon., Th.,* at 4.50. Given in 1906-07. Not given in 1907-08. Professor CARROLL and Dr. NEWCOMER.

21. Private and Public Life of the Greeks and Romans. Given in 1905-06. *Mon., Th.,* at 4.50.

22. Greek and Roman Architecture and Sculpture. Not given in 1906-07. Given in 1907-08. Professor CARROLL.

Third Section. Primarily for Graduates.

THE SEMINARY OF CLASSICAL PHILOLOGY.

Professor CARROLL ..... *Director*

The design of the Seminary of Classical Philology is to afford discipline in the methods of philological criticism and research with especial reference to the interpretation of classical authors. It is composed of all graduate students in Classical Languages, and is under the supervision of the Director, who is assisted by the other instructors of the department in certain features of the work. The authors selected for criticism and interpretation are as follows:

1906-07. Greek, 43, Attic Orators; Latin, 43, Cicero.

1907-08. Greek, 40, Aristophanes; Latin, 40, Plautus.

1909-10. Greek, 41, Thucydides; Latin, 41, Tacitus.

1910-11. Greek, 52, Homer; Latin, 42, Vergil.

Regular meetings of the Seminary are held on *Tu., Wed.,* at 4.50.

SCHOOL OF CLASSICAL STUDIES AT ATHENS.—The University, through friends, is a contributor to the support of the American School of Classical Studies at Athens, and graduates of this University are entitled to all its advantages without expense for tuition.

THE CLASSICAL CLUB.

The Classical Club, which is composed of instructors and advanced students in Greek and Latin and Classical Archæology, meets monthly for the more detailed discussion of special topics in ancient life, literature, and art than is ordinarily possible in the class-room. Teachers and patrons of the classics in Washington are admitted as associate members, and at open meetings the club avails itself, when possible, of the services of eminent scholars from other universities who may be temporarily in the city.

Students in classical languages and members of the Classical Club are invited to attend the public lectures of the Washington Society of the Archæological Institute of America, which are held usually in University Hall.

For notice of the Wachsmuth Classical Library see page 23.

ECONOMICS AND SOCIOLOGY.

C. William A. Veditz, Ph.D., LL.B.....*Professor of Economics*
Oscar P. Austin.....*Professor of Commercial Geography*

ECONOMICS.

First Section. Primarily for Undergraduates.

1. Elementary Economics. Introduction to the study of political economy, beginning with a brief sketch of the rise and development of the science and an outline of the industrial evolution of the United States. Although this is essentially a course in economic theory, the student is led to observe the phenomena of every-day industrial life. The text-books used as a basis for the course are supplemented by lectures, assigned reading from the classical economists and typical modern authorities, class-room discussions, and reports on assigned topics by members of the class. First half-year, *Mon. Wed.,* and *Fri.,* at 3.30. Professor Veditz.

2. The Economics of Distribution and Consumption. A continuation of Course 1. This course, however, places emphasis upon the problems that center around the division of the social product,—the problems of rent, interest, wages and profit. It includes also an examination of Competition, Private Property, and *Laissez faire,* from the standpoint of public welfare; and of certain problems that belong partly to the field of social ethics,—Luxury, Saving, Spending, and Speculation. Second half-year, *Mon., Wed.,* and *Fri.,* at 3.30. Professor Veditz.

Second Section. For Undergraduates and Graduates.

20. Industrial Evolution. A general survey of the development of society from an economic point of view, and more particularly to dis-

cover the forces which have given rise to modern capitalism and large-scale methods of production. Half of the course is devoted to the study of present industrial conditions in the United States, particularly the trust movement. First half-year, *Mon., Wed.,* at 4.50. Professor VEDITZ.

21. Socialism and Social Reform. The course begins with a history of communistic schemes, particularly so-called "Utopian" socialism as advocated by Plato, Thomas More, Saint Simon, Fourier, and Owen. This is followed by an examination of modern collectivism of the single-tax doctrine of Henry George, of schemes of profit-sharing between employer and employees, and of co-operation. In alternate years; not given in 1906-07. Second half-year, *Mon., Wed.,* at 4.50. Professor VEDITZ.

22. Labor Laws. A study of the principal problems arising from modern conditions of production, and of the growth, nature and policies of labor organizations,—child labor, workingmen's insurance, employers' liability, strikes, collective bargaining, etc. In alternate years; given in 1906-07. Second half-year, *Mon., Wed.,* at 4.50. Professor VEDITZ.

23. Commercial Geography. Given in the College of the Political Sciences. Two hours. Professor AUSTIN.

SOCIOLOGY.

Second Section. For Undergraduates and Graduates.

20. The Science of Society. A general course in theoretical sociology. The scope of sociology; its relation to the individual social sciences; the organic concept of society; the contract theory and its variants; the fundamental factors of social evolution; the biological, economic, and psychological schools of sociologists; race, environment, and heredity; forms of society; social institutions in their origin and development; social progress. *Tu., Th.,* first half-year, at 4.50. Professor VEDITZ.

21. American Social Problems. A course in practical sociology designed to acquaint the student with the great social problems in this country—immigration, pauperism, unemployment, charity organization and poor relief, slums, intemperance, and criminality. This course is not technical, but intended as a preparation for intelligent citizenship. Students are encouraged to undertake sociological field-work and to study the charitable and correctional institutions and practices of the District of Columbia. Class visits are made to institutions of this character, and from time to time specialists in social reform work are invited to lecture to the class. *Tu., Th.,* second half-year, at 4.50. Professor VEDITZ.

Third Section. Primarily for Graduates.

40. Criminology and Penology. An advanced course in social philosophy for the consideration of the following subjects: The concept of crime; the necessity of legal compulsion; evolution of the idea of crime; the lex talionis; the nature and purposes of punishment; social defense; the individualization of punishment; capital punishment; duels and ordeals; reformation; the indeterminate sentence; the French *loi Bérenger;* juvenile courts; prison systems; etc. Professor VEDITZ.

41. Seminary in Economics and Sociology. A limited number of students competent to undertake advanced work are organized into a Seminary for the investigation of problems in Economics and Sociology. Two hours. Professor VEDITZ.

EDUCATION.

WILLISTON S. HOUGH, Ph.M. ..... Professor
* ——————— ..... Instructor
ELMER ELLSWORTH BROWN, Ph.D. ..... Lecturer
WILLIAM ESTABROOK CHANCELLOR, Ph.D. ..... Lecturer
GEORGE E. MYERS, Ph.D. ..... Lecturer
WILLARD S. SMALL, Ph.D. ..... Lecturer
WILLIAM W. BLACK, A.B. ..... Lecturer
STEPHEN ELLIOTT KRAMER, B.S. ..... Lecturer

Course 1, or Course 2, must precede, or be taken parallel with, all courses in Education. Candidates for a degree in the Teachers Course must complete courses 1 or 2, 20, 21, or 22, 23, 24, 25, 28, and electives amounting to at least one unit in Education, and are recommended to take courses 24 and 25, or their equivalent, in Philosophy. Those desirous of specializing in School Administration are advised to take also courses 1 and 2 in Economics and 20 and 21 in Sociology.

First Section. Primarily for Undergraduates.

1. Educational Psychology. The psychological principles underlying educational theory. Specially designed for students taking the Teachers Course. Text-book with lectures. *Tu.* and *Th.,* at 10.30. First half-year.

2. The Psychology of the Teaching Process. The course includes the science and art of the recitation and of school management in general. Designed for teachers and for students in the Teachers Course. *Mon.* and *Wed.,* at 4.50. First half-year. Mr. BLACK.

Candidates for a degree in the Teachers Course must take Philosophy "1," either before, or in conjunction with, courses 1 or 2 in Education.

* To be appointed.

Second Section. For Undergraduates and Graduates.

20. Educational Doctrine Past and Present. The contributions of Plato, Aristotle, Bacon, Comenius, Locke, Rousseau, Pestalozzi, Froebel, Spencer, Hall, Dewey and others. Attention will be given to the relations between the educational thought and the great social and political movements of the same period. Monroe's "History of Education," with lectures. *Sat.,* 10 to 12. Throughout the year. (Two hours credit.) Dr. MYERS.

21. Child Study, with special reference to the problems of teaching. The subject includes adolescence and abnormal tendencies. Kirkpatrick's "Fundamentals of Child Study," with lectures, assigned reading, and experiments. *Tu.* and *Fri.,* at 4.50. Throughout the year. Dr. SMALL.

22. Principles of Teaching. A systematic and comprehensive course in pedagogical science. *Mon.* and *Wed.,* at 10.30. Throughout the year.

23. General Methods. The logical and psychological factors as determining the processes of learning and teaching. *Mon.* and *Wed.,* at 4.50. Second half-year. Mr. BLACK.

24. School Management. The purpose of this course is to discuss, chiefly with reference to higher elementary and secondary school teaching, the principles and practices of school, class and pupil instruction and discipline in both public and private schools. The methods and devices employed in successful schools, both regular and special, will be presented in detail. The course is designed both for principals, supervisors, and other teachers of experience, and for systematic teachers of education. Fifteen lectures. *Th.* at 4.50. First half-year. Superintendent CHANCELLOR.

25. School Legislation, Organization, and Administration. This course will present the social, economic, political, and cultural principles, both historically and philosophically, that have lead to modern American practices in respect to public, private, and endowed educational institutions and systems. In the light of these principles, the methods and prescriptions of both the theory and the practice of public school administration will be presented. This course is designed for the superintendents, directors, principals, and systematic students of education. Fifteen lectures. *Th.,* at 4.50. Second half-year. Superintendent CHANCELLOR.

26. Educational Theory. The list of topics in this course includes five lectures upon the theoretical bearing of certain questions relating to Educational practice. The later lectures of the course will consider the four great modern theories of education, the culture epochs or recapitulation theory, the sociological theory, the historical or opportunity theory, and the psychological theory. There will also be a

discussion of comparative national theories. Fifteen lectures. First half-year. First five lectures, Commissioner BROWN. Ten lectures, Superintendent CHANCELLOR.

28. Practice Course. Observation classes and teaching in practice schools. To count as two hours a week for half a year. Either half year.

29. The Method of the Recitation and Practical Problems of Class Management. *Tu.* and *Th.,* at 5.40. Second half-year. Mr. KRAMER.

30. Manual Training in Education. Historical survey. The justification of manual training from the biological view-point; from the sociological and economic view-points. Its fundamental aims. Present tendencies and dangers. Special problems. One hour. First half-year. Dr. MYERS.

31. Moral Aspects of Education. The place of the school in moral training, in relation to the home, the church, and the general social environment. The physiological basis of character. Development of the moral nature in the child. Individual differences. The teacher's personality. The various means afforded by every school for moral training. Direct versus indirect means. Special methods of moral training,—Abbotsholme, Ethical Culture school, Elmira Reformatory, etc. Harmonizing the moral forces of the school. One hour per week. Second half-year. Dr. MYERS.

32. School Sanitation and Hygiene. This course will present such data and principles of hygiene and sanitation as are necessary for intelligent teaching. Special attention will be given to diseases and defects incident to school life, to instruction as related to fatigue, and to particular subjects and practices. Lectures, demonstrations, and reference work. One hour a week. First half-year. Dr. SMALL.

33. Education as a Factor in Public Health. This course will consider the function of education in promoting public health; the present status of health control in public education; and the administration problems involved. Seminar open only to advanced students. One hour a week. Second half-year. Dr. SMALL.

34. Method in Teaching Grammar and Composition. Designed for both elementary and secondary instruction. One hour a week. First half-year. Mr. BLACK.

35. Method in Teaching Reading and Literature. (In sequence to Course 34.) One hour. Second half-year. Mr. BLACK.

36. Nature Study. Seminary Course. Individual problems worked out with reference to the principles and methods of nature study. One hour a week. First half-year. Mr. BLACK.

37. Educational Ends and Values. Lectures on the Philosophy of Education. One hour a week. Second half-year. Professor HOUGH.

(Courses 30 to 37 inclusive will not be given in 1907-08, but may be expected in 1908-09.)

Third Section. Primarily for Graduates.

40. Educational Psychology. Special problems in the psychological basis of educational theory will be arranged for graduates taking a major or minor in Education. Professor HOUGH.

ELECTRICAL ENGINEERING.

FRANK A. WOLFF, Ph.D.....*Professor*
PHILANDER BETTS, M.S., E.E.....*Assistant Professor*
A. PRESS, B.S.....*Lecturer*
EVERETT W. VARNEY, A.B.....*Instructor*

First Section. Primarily for Undergraduates.

1. Elementary Mathematical Theory of Electricity and Magnetism, with special attention to the needs of engineering students. Three hours a week, until January 1.

2. Direct-current motors and generators. Covers the laws of the magnetic circuit as applied to the dynamo. Students are required to design a direct-current machine. Text-books: Hawkins and Wallis's "The Dynamo." Three hours a week, beginning January 1st.

3. Elements of Electrical Engineering. Text-book: Tyson Sewell's "Elements of Electrical Engineering." Two hours a week.

4. Electrical Measurements. A laboratory course for Juniors. Selected experiments. Foster's hand-book and special laboratory notes are used for reference. Six hours a week, first term.

5. Electrical Laboratory. Experiments and tests involving the operation of direct-current dynamos and motors, including tests of motors in service, operating elevators, street cars, and machinery of various kinds. Textbook: Sever and Townsend's "Laboratory and Factory Tests in Electrical Engineering." Six hours a week, second term.

6. Industrial Electricity. A practical course intended for Juniors in Civil Engineering, embracing the selection and operation of electrical machinery, electric railways and other applications of electric motors. Two hours a week for the first term.

7. Electrical Engineering. A course in theoretical and applied electricity intended for Seniors in Mechanical Engineering. It embraces the selection and operation of electrical machinery, the location, construction, and operation of power plants, electric railways and transmission lines, the use of electric motors for driving machinery, and the working of storage batteries, elevators, hoists, and cranes. Three hours a week.

Second Section. For Undergraduates and Graduates.

21. Alternating Current Theory and Machinery. A course for Seniors in Electrical Engineering, covering the principles of single as well as polyphase currents, including study of machines, circuits, transformers, etc. Four hours a week, Senior year.

22. Electrical Distribution. A course for Seniors in Electrical Engineering covering the whole field of distribution of electricity for light and power. Text-book: Crocker's "Electric Lighting"; second volume, "Distribution Systems." Two hours a week.

23. Electrical Applications. A course for Seniors in Electrical Engineering, covering the more important applications of electricity, such as illumination, motive power, signalling, telephony, electro-chemistry, etc. Two hours a week.

24. Advanced Laboratory Work for Seniors in the Electrical Engineering Course. Covers test and experimental work with direct and alternating currents, tests of machines, circuits, transformers, circuits containing inductance and capacity, measurement of power in alternating current circuits, plotting of curves, etc. Text-book: Sever and Townsend's "Laboratory and Factory Tests in Electrical Engineering," with Foster's Electrical Engineer's Hand-book for general reference. Six hours a week.

25. Inspection of Plants and Industrial Works. In the vicinity of Washington and Baltimore are a number of modern electric lighting and street railway plants, telephone exchanges, telegraph operating rooms, Government laboratories devoted to special work, etc., which afford students of Electrical Engineering an opportunity to familiarize themselves with nearly all types of apparatus in use. The visits are followed by class discussion based on written descriptions submitted by the students.

Juniors and Seniors in Electrical Engineering are required to attend the monthly meetings of the Washington Branch of the American Institute of Electrical Engineers held at the University.

Third Section. Primarily for Graduates.

41. Advanced Dynamo Design. This comprises the more rigid calculation of the magnetic circuit, the estimation of the electrical and mechanical losses, together with an exposition of the elements of mechanical design. For the direct current dynamo the theory of commutation will be dealt with in detail. In alternating current working, as well as direct, the theory of armature reaction will be thoroughly gone into. For the induction motor the Ossana circle diagram will be exclusively used. The calculation of the magnetic dispersion coefficients and the self-induction and apparent resistance of conductors due to

high frequency phenomena will be made an important part of the course. An elementary knowledge of the differential and integral calculus will be necessary as the advanced work will require an elucidation of the theory of potential.

42. Advanced Course in the Mathematical Theory of Alternating Currents.

43. Advanced Course in Polyphase Currents.

44. Advanced Laboratory Work, Alternating (including Polyphase) Current Apparatus.

ENGLISH.

WILLIAM ALLEN WILBUR, A.M.....*Professor*
DE WITT C. CROISSANT, A.B.....*Assistant Professor*
HARRIETT STRATTON ELLIS, A.B.....*Instructor*

First Section. Primarily for Undergraduates.

1. Rhetoric. The principles of self-expression in three phases, in the science of rhetoric, in English literature, and in composition. *Tu., Sat.*, at 10.30. Professor WILBUR.

2. Rhetoric. Parallel with Course 1. *Mon., Fri.*, at 4.50. Professor WILBUR.

NOTE.—The required Freshman English consists of Courses 1 and 9, or 2 and 10.)

3. Prose. The development of prose from Sir John Mandeville to Robert Louis Stevenson. About twenty representative prose works are studied in chronological order. The aim of the course is to study critically the development of prose in regard to its form. The course is open to students who have passed in Freshman English. *Mon.*, at 9.30; *Wed.*, at 9; *Fri.*, at 9.30. Assistant Professor CROISSANT.

5. American Literature. Lectures on the development of the literature. Students taking this course are required to do wide reading, which is discussed by the class. *Mon., Fri.*, at 5.40. Assistant Professor CROISSANT.

6. English Literature. An historical development, with the design of giving a general view and emphasizing the art motive together with the various foreign influences that enter into the formation of the literature. Open only to women. *Tu., Th.*, at 3.30. Miss ELLIS.

7. English Literature. Parallel with Course 6. Open only to men. *Tu., Th., at* 9.30. Assistant Professor CROISSANT.

9. *a.* Logic. Text-book, with lectures. First half year.

b. Psychology. Text-book, with lectures. Part 1. Second half year.

This course is to be taken in conjunction with Course 1. *Th.*, at 10.30. Professor HOUGH.

10. *a.* Logic. First half year.

b. Psychology. Second half year.

Parallel with Course 9. To be taken in conjunction with Course 2. *Wed.*, at 4.50. Professor HOUGH.

Second Section. For Undergraduates and Graduates.

20. Composition. An advanced course open to students who have passed in Freshman English. *Tu.*, at 1.30. Professor WILBUR.

22. Shakespeare. The Comedies. Given in 1906-07. Not given in 1907-08. Professor WILBUR.

23. Shakespeare. Tragedies and Romances. Given in 1907-08. *Mon., Wed., Fri.*, at 1.30. Professor WILBUR.

The Temple edition of Shakespeare is recommended.

26. English Romanticism. The history of the Romantic movement in England with studies in the literature. The course may be taken only in conjunction with French 26. Given in 1907-08. *Tu., Th.*, at 11.30. Professor WILBUR.

27. The English Novel. Development of the Novel, with critical studies of selected works, including some contemporary fiction. Given in 1906-07. Not given in 1907-08. Professor WILBUR.

28. Old English. A beginners' course; the essentials of the grammar and readings from Old English texts. Bright's Reader. [Advanced work may be arranged for competent students.] *Tu., Th.*, at 2.30. Assistant Professor CROISSANT.

30. Middle English. In the first term particular attention is given the grammar; in the second term more attention is given the literature, with wider reading and special reports. Emerson, A Middle English Reader. [Advanced work may be arranged for competent students.] *Mon., Fri.*, at 2.30. Assistant Professor CROISSANT.

34. History of English Literature to 1700. Given in 1906-07. Not given in 1907-08.

35. History of English Literature since 1700. Not given in 1906-07. Given in 1907-08.

Courses 34 and 35 are given in alternate years, and together form a complete history of English Literature. Lectures are given on the development of the literature, and the class is required to read as widely in the literature itself as the time allows. Open to students who have passed in English 6 or 7 or an equivalent course. *Mon., Fri.*, at 10.30. Assistant Professor CROISSANT.

Third Section. Primarily for Graduates.

40. History of the English Language. Development of the sounds and inflections with some reference to the other Germanic dialects. A reading knowledge of German and previous study of Old and Middle English are prerequisite. Assistant Professor CROISSANT.

44. Seminary in English Literature. Subject in 1906-07: British Poetry of the Nineteenth Century. Subject in 1907-08: Paradise Lost. Two hours. Professor WILBUR.

53. English Romanticism, with particular reference to the beginnings of the romantic movement in the eighteenth century.

55. Religious Philosophy in the Poetry of Tennyson.

Other courses may be arranged for competent graduates.

GEOLOGY AND MINERALOGY.

GEORGE P. MERRILL, Ph.D.....*Professor*
TIMOTHY W. STANTON, Ph.D.....*Assistant Professor*
R. S. BASSLER, Ph.D.....*Assistant Professor*

First Section. Primarily for Undergraduates.

1. Mineralogy. Crystallographic, descriptive, and determinative mineralogy. This course is designed with especial reference to minerals as rock constituents or segregated as ore deposits. It includes, therefore, a discussion of not merely the crystallographic and theoretical, but the practical side of the subjects as well. Whenever possible, it should be considered as introductory to the courses in either systematic or economic geology. *Tu., Th.,* at 5.40.

2. Geology. Systematic geology; dynamical, structural, and stratigraphical. The course is designed to form a part of a general-culture course, or a preliminary course for those intending to make a specialty of geology. It includes lectures, recitations, laboratory and field work so far as hours will permit. Paleontology is treated as a branch of geology, having especial reference to stratigraphy and correlation. Textbooks: Scott's Introduction to Geology; Merrill's Rocks, Rock Weathering and Soils. *Mon., Fri.,* at 5.40.

Second Section. For Undergraduates and Graduates.

20. Economic Geology. The course consists largely of lectures upon the subjects comprised under: (1) Mineral veins and metalliferous deposits, their mode of occurrence, origin, and classification; (2) the ores of iron, copper, lead, zinc, tin, silver, gold, mercury, antimony, etc.; and (3) the non-metallic minerals, as the coals and hydrocarbon compounds; salts and materials used in chemical manufactures; abrasive, refractory, and fictile materials, pigments, gems, ornamental stones,

building stones, limes, cements, and mineral waters. Text-books: Ries' Economic Geology of the United States; Merrill's Stones for Building and Decoration, and the Nonmetallic Minerals. *Mon., Fri.,* at 4.50.

21. Paleontology. A course in lecture and laboratory work on the biological and geological relations of the more important types of animals and plants, with especial reference to their value in stratigraphic geology. Two hours.

Third Section. Primarily for Graduates.

Advanced study in Geology, both systematic and applied, is arranged to cover two years.

40. Advanced Geology and Paleontology. The student in this first-year course may devote his time largely, if necessary, to perfecting himself in methods; to general work in the laboratory and in the field; to the examination of geological materials, and to familiarizing himself with the literature of the subject. The utility of the various text-books is recognized, but a very large portion of the desired knowledge on any subject must be gained from special memoirs and from the current literature as it appears in numerous periodicals. The various sources of information, the most essential lines of work, as well as the most promising fields of investigation, are from time to time indicated by the instructor.

41. Advanced Paleontology and Stratigraphic Geology. A continuation of Course 21. Besides the study of paleontological methods, the student is expected to pursue some special line of investigation in order to fit himself for original research.

GERMANIC LANGUAGES AND LITERATURES.

HERMANN SCHOENFELD, Ph.D., LL.D.....*Professor*
A. F. W. SCHMIDT, A.M.....*Assistant Professor*

First Section. Primarily for Undergraduates.

1. A preliminary course in grammar, narrative prose, the elements of historical reading, and select poems of the principal modern poets. Special stress is laid on exercises in composition. One classic (Schiller) is studied. The work done is equivalent to a two years' course in high schools or academies of good standing. Open to students who have not presented German for admission. *Tu., Th., Sat.,* 9.30. Assistant Professor SCHMIDT.

2. Parallel with Course 1, but planned primarily for students in the sciences. *Tu., Th., Sat.,* at 4.50. Assistant Professor SCHMIDT.

3. The deeper aspects of grammar; accurate training in phonetics and translation into German; conversation; readings from the best

German prosaists and poets; selected texts from Schiller, Lessing, Goethe, Freytag, and the foremost recent authors. Beginnings of German literature and history. Open to students who have passed Course 1 or 2, or have fulfilled the entrance requirement in Elementary German. *Mon.,* at 11.30; *Wed.,* 11; *Fri.,* at 11.30. Professor SCHOENFELD.

4. Parallel with Course 3, but planned primarily for students in the sciences. *Tu., Th., Sat.,* at 5.40. Assistant Professor SCHMIDT.

5. Advanced course in German syntax; principal difficulties of the language; idioms; synonyms; extensive translations of the best English prosaists into German; essays; selected advanced prose; classical reading and literature; German history. Special training for advanced students in the historical and economic departments. Open to students who have passed Course 3 or have fulfilled the entrance requirements in Advanced German. *Mon., Wed., Fri.,* at 1.30. Professor SCHOENFELD.

6. Parallel with Course 5, but planned primarily for advanced students in the sciences.

Second Section. For Undergraduates and Graduates.

20. German Literature in the first half of the nineteenth century; its social and political aspects; special study of Kleist, Uhland, Heine; the Romantic School; classicism till Goethe's death; essays, lectures, and collateral reading. *Tu., Th.,* at 10.30. Professor SCHOENFELD.

21. German Literature of the Classic Period at its zenith; Goethe's and Winckelmann's influence on German art; Modern German drama; Hebbel, Ludwig, Freytag, Heyse, Sudermann, Fulda, Hauptmann. *Mon.,* at 10.30; *Wed.,* at 10; *Fri.,* at 10.30. Professor SCHOENFELD.

The intervening periods of Modern German Literature will be studied during the subsequent academic year.

Third Section. Primarily for Graduates.

40. German Literature in the sixteenth century. Braune's Neudrucke Deutscher Literaturwerke. Humanism and Reformation, with special reference to Italian and French influences and their historical basis. Original readings from the Humanists, Hans Sacks, Fischart, and Luther's works. The reformatory projects of Cardinal Nicolaus Cusanus and of Erasmus, Hutten, and Reuchlin. Professor SCHOENFELD.

41. German Literature in the twelfth and thirteenth centuries, with special regard to the Nibelungen lay, the Gudrun saga, Wolfram von Eschenbach. The lyrics of Walther von der Vogelweide. The grammatical aspects of the classics of the first period of bloom. Professor SCHOENFELD.

The other phases of older German literature and philology will be studied in subsequent years, so that the general range of the history of German Literature may be covered every three years.

45. The emerging of the Germanic, Romance, and Slavic races in European History. The Migration of Peoples. The Evolution of European States to the rise of the Hapsburg House. Cultural elements influencing the three predominating races of Europe. (Selections from the historical sources are read and interpreted.) Professor SCHOENFELD.

46. The Annihilation and Reconstruction of Prussia (Historical and literary sources will be searched). The Building up of the Modern German Empire (Archival studies, literary, social forces, Bismarck's literary work.) Professor SCHOENFELD.

47. Gothic. Gothic Grammar and translation of select passages from Wulfila. Braune's Gotische Grammatik. Assistant Professor SCHMIDT.

The aim of this course and the one following is to give the student an insight not only into the development of the German language, but also into the principles of Germanic philology.

48. Old High German. Old High German Grammar and translation of select passages in prose and verse. This course alternates with the one in Gothic. Not given in 1907-08. Given in 1908-09. Assistant Professor SCHMIDT.

For notice of the Richard Heinzel Germanic library, see page 120.

GRAPHICS.

EDWIN V. DUNSTAN, C.E.....*Instructor*
ARTHUR CUTTS WILLARD, B.S.....*Instructor*

First Section. Primarily for Undergraduates.

1. Mechanical and Freehand Drawing. A general course embracing the care and use of instruments; orthographic and isometric projections; sections and intersections; curve plotting; sketching of simple machine details; freehand lettering; principles of working drawings. Six hours a week in the drawing-room.

2. Advanced Mechanical Drawing. A course in working drawings especially designed for Electrical and Mechanical Engineering students. Drawing-room rules and practice; conventional forms and standards; arrangement of views and sections; freehand shop-sketches; detailing from sketches, models and general drawings; proportioning by empirical formulæ. Every effort is made to develop distinctness in delineation, accuracy in dimensions and professional style and finish in each drawing. Six hours a week in the drawing-room.

8. Descriptive Geometry. A study of the representation of lines, surfaces, and solids, and of their relations; tangencies, intersections, and developments; warped surfaces; shades and shadows; original construction problems. Two lectures and one drawing period per week.

10. Topographic Drawing. A general course to accompany the work in surveying. One drawing period per week.

Second Section. For Undergraduates and Graduates.

20. Graphic Statics. Principles and methods, including the construction and use of the force and equilibrium polygons; dead, live, snow, and wind loads; the graphic analysis of beams, girders, roof, and bridge trusses. Two lectures and one design period per week.

Third Section. Primarily for Graduates.

40. Advanced Graphic Statics. A study of the graphical analysis of higher structures, with special reference to the method of influence lines.

GREEK.

(See statement under Classical Languages and Literatures.)

HISTORY.

CHARLES CLINTON SWISHER, Ph.D., LL.D.....*Professor*
*L. RUSSELL ALDEN, A.M.....*Instructor*
JAMES FREDERICK PEAKE, A.M.....*Instructor*
†——— ——— .....*Instructor*
WILLIAM HAMILTON, Ph.D.....*Lecturer*

First Section. Primarily for Undergraduates.

1. Mediæval History. Beginning with a comprehensive survey of those conditions of ancient civilization which have been most potent in their influence upon later times, this course treats in detail the migration and settlement of the Germanic tribes in the territory of the Empire, and the gradual blending of Roman and Teutonic institutions into the modern state. Text-books, lectures, and collateral reading. *Mon., Wed., Fri.,* at 2.30. Mr. PEAKE.

2. Modern European History. A history of the European states, under the new conditions brought into existence by the Protestant Revolution, the invention of printing, and the discovery of America, to the period of the French Revolution. Text-books, lectures, and reports. *Tu., Th., Sat.,* at 11.30. Mr. PEAKE.

* Absent on leave. † To be appointed.

3. English Constitutional History. A history of the evolution of parliamentary government, with incidental study of social and industrial development. *Mon., Wed.,* at 4.50. Professor SWISHER and Mr. PEAKE.

Second Section. For Undergraduates and Graduates.

20. Ancient History. A history of the Eastern Nations and Greece to the period of the Roman Conquest. Text-books and collateral reading. *Mon., Fri.,* at 10.30. Omitted 1907-08. Mr. ———.

21. Roman History. The political history of Rome from the establishment of the republic to the reign of Constantine the Great. Text-books and collateral reading. *Mon., Fri.,* at 10.30. Mr. ———.

22. European History During the Revolutionary Period. The political significance of the Revolution of 1789, the career of Napoleon, and the subsequent progress toward constitutional government on the continent of Europe through the revolutionary movement of 1848. Lectures, text-books, and examinations, with the assignment of special subjects for investigation and report. *Tu., Th.,* at 4.50. Professor SWISHER and Dr. HAMILTON.

23. Contemporaneous History. The realization of the movements toward national unity in Germany and Italy, with a discussion of the resulting conditions in their relation to international politics. Lectures and examinations, with the assignment of special subjects for investigation and report. Open to students who have completed courses 1, 2, and 22. *Wed., Fri.,* at 2.30. Professor SWISHER and Dr. HAMILTON.

24. European Diplomatic History. A general history of the international relations of the European states from the treaties of Westphalia, with special discussion of some of the more recent treaties. Lectures, examinations, and collateral reading. Open to students who have completed courses 22 and 23. *Wed., Fri.,* at 5.40. Professor SWISHER and Mr. PEAKE.

25. American Colonial History. A study of the economic, political, and social conditions of the English colonies which led to the Revolution of 1776, and the movement toward national union. Lectures, text-books, and collateral reading. *Mon., Fri.,* at 4.50. Professor SWISHER.

26. American Constitutional History. The origin and development of the Federal Constitution of 1789, with a comprehensive study of its interpretation under the pressure of party issues extending through the periods of division and reunion. Lectures, text-books, and collateral reading.. *Mon., Fri.,* at 4.50. Professor SWISHER.

27. American Industrial History. An economic interpretation of some of the more distinctive phases of American politics. Open to students who have completed courses 25 and 26. Two hours. *Tu., Th.,* at 4.50. Professor SWISHER.

28. Party Government in the United States. A study of the issues upon which parties are founded, with an examination into party methods as illustrated in political platforms, primaries, nominating conventions, and campaign literature. Open to students who have taken courses 25 and 26. Two hours. *Wed., Fri.,* at 1.30. Professor SWISHER.

29. The Spanish Colonies in America. A study of the Spanish colonial policy as illustrated in the growth and subsequent independence of Mexico and the South American states. Lectures and examinations. Two hours. *Mon.,* at 0.30; *Wed., at* 9.00. Professor SWISHER.

30. Current History. A discussion of political questions of the present time with special reference to their origin and historical significance. One hour. Lectures and examinations. *Wed.,* at 11.00. Professor SWISHER.

Third Section. Primarily for Graduates.

40. A discussion of the sciences auxiliary to historical study, of historical materials, and of the methods employeds in the investigation, presentation, and general treatment of historical evidence. The course is intended primarily as an object lesson in the principles of historical criticism, for the assistance of graduate students in the preparation of theses. Professor SWISHER.

41. American Constitutional History, 1776 to 1789. A history of the origin and formation of the Federal Constitution. Professor SWISHER.

42. The Slave System in American Politics. A study of parties and party issues from the period of the Missouri Compromise to the formation of the Republican Party. Professor SWISHER.

43. American History from 1860 to 1883. A constitutional study of the period of Civil War and Reconstruction. Professor SWISHER.

44. English Constitutional History from 1603 to 1689. A study of the constitutional issues between Crown and Parliament under the Stuarts through the Revolution of 1689. Professor SWISHER and Mr. PEAKE.

45. English History from 1783 to 1885. A history of the reform movement in England from the close of the American Revolution through the second ministry of Gladstone. Professor SWISHER and Mr. PEAKE.

46. The History of France from 1789 to 1804. Constitutional development in France from the meeting of the States General to the beginning of the First Empire. Dr. HAMILTON.

Work in seminaries. The results of individual research upon assigned topics, and reviews of recent political and historical publications by graduate students will be discussed at the weekly meetings of the seminaries of history.

HYDRAULIC ENGINEERING.

HENRY L. ABBOTT, LL.D.....*Professor*

Third Section. Primarily for Graduates.

40. Laws of flowing water, in natural channels, in pipes, and over weirs, with modes of measurement.

41. Underground flow as sources of supply, with modes of estimation.

42. Relation to rainfall run-off.

43. Regulation of river flow for purposes of navigation, and for protection against inundation.

44. Slack-water navigation, including dams, canal locks, and waste weirs.

45. Earth dams and river embankments, theory and modes of construction.

45. Effect of forests upon water supply.

ITALIAN.

(See statement under Romance Languages and Literatures.)

LATIN.

(See statement under Classical Languages and Literatures.)

MATHEMATICS.

JAMES HOWARD GORE. Ph.D.....*Professor*
PAUL NOBLE PECK. A.M.....*Assistant Professor*
GEORGE ALBERT ROSS, A.M.....*Instructor*

First Section. Primarily for Undergraduates.

2. Plane and Solid Geometry: Gore's Plane and Solid Geometry; *Tu., Th.,* at 5.40. Assistant Professor PECK.

3. Solid Geometry: Gore's Plane and Solid Geometry. *Mon.,* at 9.30; *Wed.,* at 9; *Fri.,* at 9.30, October and November. Assistant Professor PECK.

4. Algebra: Bowser's College Algebra. *Mon., Wed.,* at 4.50. Assistant Professor PECK.

5. Algebra: Bowser's College Algebra. *Mon.,* at 9.30; *Wed.,* at 9; *Fri.,* at 9.30, December to March. Assistant Professor PECK.

6. Solid Geometry: Gore's Plane and Solid Geometry. *Tu., Th., Sat.,* at 4.50, October and November. Assistant Professor PECK.

7. Plane Trigonometry: Gore's Plane and Spherical Trigonometry. *Mon.,* at 9.30; *Wed.,* at 9; *Fri.,* at 9.30, April and May. Assistant Professor PECK.

8. Algebra: Bowser's College Algebra. *Tu., Th., Sat.,* at 4.50, December to March. Assistant Professor PECK.

9. Trigonometry: Gore's Plane and Spherical Trigonometry. *Mon.,* at 11.30; *Wed.,* at 11; *Fri.,* at 11.30, October to December. Professor GORE.

10. Plane Trigonometry. Gore's Plane and Spherical Trigonometry. *Tu., Th., Sat.,* at 4.50, April and May. Assistant Professor PECK.

11. Analytic Geometry: Smith and Gale's Analytic Geometry. *Mon.,* at 11.30; *Wed.,* at 11; *Fri.,* at 11.30, January to May. Professor GORE.

12. Trigonometry: Gore's Plane and Spherical Trigonometry. *Mon., Wed., Fri.,* at 5.40, October to December. Assistant Professor PECK and Mr. Ross.

14. Analytic Geometry: Plane and Solid; Smith and Gale's Analytic Geometry. *Mon., Wed., Fri.,* at 5.40, January to May. Assistant Professor PECK and Mr. Ross.

NOTE.—Courses 2 and 4 are intended for students who desire to review some parts of elementary algebra and plane geometry, in order to obtain that thorough and ready knowledge of these fundamental mathematical studies that is necessary for their proper use in other subjects. These classes are not intended for beginners. and only students who have studied elementary algebra and plane geometry are admitted.

Courses 3, 5, and 7 are designed to occupy one year; likewise Courses 2 and 4.

Second Section. For Undergraduates and Graduates.

20. Differential and Integral Calculus: Taylor. *Mon., Wed., Fri.,* at 4.50, for six months. Professor GORE and Mr. Ross.

21. Differential and Integral Calculus: Taylor. *Mon.,* at 9.30; *Wed.,* at 9; *Fri.,* at 9.30, for six months. Professor GORE and Mr. Ross.

22. Differential Equations: Osborne. *Mon., Wed., Fri.,* at 4.50, April and May. Professor GORE and Mr. Ross.

23. Differential Equations: Osborne. *Mon.,* at 9.30; *Wed.,* at 9; *Fri.,* at 9.30. Professor GORE and Mr. Ross.

In all the above courses the text is supplemented by lectures and the principles emphasized by proposing for solution a large number of problems taken from the best European and American authorities.

While the disciplinary value of the study of mathematics is never lost sight of, the importance of its practical application is insisted upon.

Third Section. Primarily for Graduates.

41. Theory of the Complex Variable. Lectures with reference to Durege and Forsyth. Professor GORE.

43. Differential Equations. Cohen's Differential Equations. Professor GORE.

45. Elliptic Functions. Lectures with reference to Cayley, Tannery and Molk, and Koenigsberger. Not given in 1907-08.

MECHANICAL ENGINEERING.

..... *Professor*
EDWARD ADAMS MUIR, B.S.....*Assistant Professor of Graphics*
PHILANDER BETTS, E.E...*Assistant Professor of Electrical Engineering*
ARTHUR CUTTS WILLARD, B.S.....*Instructor*

First Section. Primarily for Undergraduates.

1. Mechanism. A course in the systematic study of the kinematics of machinery, in which mechanical movements are reduced to scientific analysis. Carefully developed problems and diagrams of changes of position and speed in mechanisms are constantly used.

Some attention is given to the design of gear teeth, and valve gears for steam engines, and the necessary theory for such design is carefully studied. Wherever possible the application of the principles of mechanism to modern American machine tools is discussed. Two lecture-recitation hours and two drawing hours per week during the Sophomore year.

4. Woodwork. This course is intended to provide the student with a knowledge of the principles involved, rather than manual dexterity in such work, which can only be secured by prolonged practice.

The work includes: (1) Exercises in planing, sawing, mortising, joining, framing, and other work involving the common carpenters tools; (2) exercises involving the use of power machinery, circular saws, planer, scroll saw, lathe, etc.; (3) exercises in pattern making, including patterns and core-boxes for various machine parts; (4) study of moulding, casting, and foundry operation. Four hours per week in the shops during the Sophomore year.

5. Metal Work. This course is intended to illustrate, by practical work, the methods and principles underlying the best modern practice.

The work includes: (1) Exercises in forging, heating, bending, welding, annealing, hardening, tempering, etc., including toolmaking; (2) exercises in vise-work, including chipping, filing, scraping, polishing, etc.; (3) exercises in machine work in metals, including turning, planing, boring, grinding, etc. Six laboratory hours per week during the Junior year. Electrical Engineering students are given a modified course of three hours per week.

6. Enginering Drawing. This course provides for the application of the principles taught in the courses of Mechanism and Steam Engineering to specific problems. Practice is given in the design of valve gears and quick return motions, and in the determination of velocity diagrams for special engine and other linkages.

There is also included the complete working drawings for a steam boiler, with the idea of not only teaching the method of drawing boilers, but also to give more familiarity with the construction and details of steam boilers. This latter work is preparatory to the course in Machine Design. Six drawing hours per week during the Junior year.

7. Machine Design. This course is an application of principles already acquired to problems in design, each student being required to complete every detail of the design undertaken.

The subjects taken as design problems are: The design of a boiler; permanent and temporary fastenings for machine parts; a crank; a large shaft with pulley and gear wheels, rotating and sliding pieces, etc. The constructive details and calculations are discussed and the limitations of thoretical and empirical formulæ pointed out. Results are made to conform with experience and the best practice. One lecture-recitation hour and three drawing hours per week during the Senior year.

9. Engineering Laboratory. A course of practical work in testing general engineering apparatus for efficiency. The work consists in indicating steam engines; determining the evaporative efficiency of boilers; tests on the strength of materials; measurement of the flow of water; gas engine brake tests; refrigeration tests; and fuel value determinations. Students will be encouraged to adjust their machines for as wide a range of operations as possible, and a careful study will be made of the resulting effect on the efficiency. The student's observations and computations on any test are critically compared with those of the instructor. Six laboratory hours per week for the last half of the Junior year.

10. Engineering Laboratory. This course is a completion of Course 9. Six hours a week during the Senior year.

12. Elements of Steam Engineering. A course designed for the needs of Civil Engineering students. It deals briefly with valve gears, power plant accessories, thermodynamics, steam engines, steam pumps, and steam boilers. Two lecture-recitation hours per week during the Senior year.

Second Section. For Undergraduates and Graduates.

20. Steam Engineering. The first half year of the course deals with the principles of Thermodynamics; the properties of gases and vapors, especially steam; the flow of steam and other fluids, and the steam injector.

The application of the above principles is discussed, and the simple, compound, and multiple expansion steam engines are studied. A careful study is also made of available data from efficiency tests.

The last half year of the course is devoted to the study of steam boilers and power plants, and their accessories. A design, with plans and specifications, for a power plant of industrial proportions is required from each student. Three lecture-recitation hours per week during the Junior year.

22. Internal Combustion Motors. This course will deal with the theory, design, and practice concerning gas, gasoline, and other engines.

The work will include: (1) The fuels employed, their energy content, and its conversion into mechanical work; (2) the cycle of operations of the heat medium, with details of method of transforming heat into work, and types of motor; (3) the practical details of operation, mixing the charge, carburation, ignition, and governing; (4) the manipulation and practice, and a discussion of economy and performance from tests. The design of some simple type of motor will be completely worked out and discussed. Three lecture-recitation hours per week for the first half of the Senior year.

23. Hydraulic Machinery. This course provides for an elementary study of hydraulic prime movers and pumping machinery. It includes a discussion of the theory and design of turbines and turbine blades for low and high heads, and turbine governors.

The course will also treat of impulse wheels; water motors of the piston type; machinery for the utilization of hydraulic pressure; hydraulic pressure pumps, and hydraulic presses; hydraulic tools; pumps operated by steam, electricity, or power; and high duty pumps and water meters. Two lecture-recitation hours per week for the first half of the Senior year.

24. Technical Machinery. This course is intended to provide the engineering student with a knowledge of the method of operation of various types of technical machinery and the essential accessories of the same.

The fundamental features of each type will be discussed, the best practical example of each being used as a basis. In this way a correct conception of the proper manipulation and operation of such machinery will be secured. One lecture hour per week for the first half of the Senior year.

25. Compression and Refrigeration Machinery. A course in which the principles of thermodynamics are applied to the commercial methods of compressing air and securing artificial refrigeration. The work will also include the mechanical principles concerned in the design of air compressors as well as the transmission of air in high pressure piping.

The relative advantages of refrigeration systems will be discussed,

as brought out in the theory and practice of actual machines using ammonia, air, and other gases, and fluids. Three lecture-recitation hours per week in the last half of the Senior year.

28. Industrial Management. A course dealing with the business systems of manufacturing establishments.

The work includes a study of the organization and relations of the various departments of an industrial establishment, both in the office and in the workshop. It also discusses the conduct of accounts, the methods of superintendence and of compensating labor, the determination of the costs of production, and the effect on costs of different systems of distributing indirect expenses. One lecture-recitation hour per week for the last half of the Senior year.

METEOROLOGY.

CLEVELAND ABBE, A.M., LL.D.....*Professor*

Third Section. Primarily for Graduates.

40. Experimental and Laboratory Work in Meteorology. The theories of instruments and the laws of atmospheric phenomena, so far as they are susceptible of elucidation by laboratory experiment.

41. Practical Meteorology. Cartography; daily weather charts; methods of predicting the weather for a few days; long-range predictions for seasons, methods of verification; the climates of past geological ages; the methods of reduction and publication.

42. Physical and Theoretical Meteorology. The present state of our knowledge of atmospheric phenomena as problems in thermodynamics and hydrodynamics, culminating in Bjerknes' treatment of the atmosphere as a field of force. An extensive course of reading and private study is marked out for the pupil, and his thesis for the degree of Ph.D. must be in the field of physical meteorology.

PHILOSOPHY.

JAMES MACBRIDE STERRETT, A.M., D.D.....*Professor*
WILLISTON S. HOUGH, Ph.M.....*Professor*
GEORGE LANSING RAYMOND, L.H.D.....*Professor of Æsthetics*
SHEPHERD IVORY FRANZ, Ph.D....*Professor of Experimental Psychology*
WILLIAM T. HARRIS, LL.D.....*Lecturer*

First Section. Primarily for Undergraduates.

NOTE.—Elementary courses in Logic and Psychology are given in connection with English 1 and 2. (See courses 9 and 10 under "English.")

1*a*. The Principles of Science. A study of the structure of knowledge and of the methods of exact science. Text-book, with lectures. *Mon.*, at 9.30; *Wed.*, at 9.00; *Fri.*, at 9.30. First half year. Professor HOUGH.

1*b*. Psychology. General Course, with emphasis of the psychological principles underlying ethical, educational, and sociological theory. Text-book, supplemented by lectures. *Mon.*, at 9.30; *Wed.*, at 9.00; *Fri.*, at 9.30 Second half year. Professor HOUGH.

2. Educational Psychology. (Either course 1 or 2 under "Education.")

Second Section. For Undergraduates and Graduates.

20. Epistemology. Lectures on the theory of knowledge of the Greek philosophers and first-hand study of the theories of Descartes, Locke, Berkeley, and Hume. First half year. *Mon.*, at 10.30; *Wed.*, at 10. Professor STERRETT.

21. The Kantian Epistemology. Lectures based on a critical study of the text of Kant's Critique of Pure Reason. Knowledge of German is desirable. Second half year. *Mon.*, at 10.30; *Wed.*, at 10. Professor STERRETT.

22. The History and Psychology of Religion. Lecture course with prescribed readings and a thesis. *Tu., Th.*, at 10.30.

23. Plato. A critical reading of a number of the shorter dialogues with a special study of The Republic. Lectures with abstracts and a thesis. One hour. Professor STERRETT.

24. History of Philosophy. An outline of the evolution of philosophic thought from early Greek times to the close of the 19th century. Parts of Rogers' "Student's History of Philosophy," supplemented by lectures and assigned reading. *Tu.* and *Th.*, at 9.30. First half year. Professor HOUGH.

25. Ethics. The science of moral conduct. Special attention will be given to the following topics: the cognitive factors of conduct; the origin and authority of moral standards; the theories of the moral end; the nature of conscience; the system of the virtues; and the social aspects of morality. Text-book, supplemented by lectures and topical reference work. Theses. *Tu.* and *Th.*, at 9.30. Second half year. Professor HOUGH.

26. Greek and Christian Ethics. Critical reading of selected Dialogues of Plato and 6 Books of Aristotle's Ethics, with introductory lectures on the development of moral ideas from Homer to the Roman Stoics, and a sketch of Christian ethics. *Tu.* and *Th.*, at 9.30. First half-year. Not given in 1907-08. Professor HOUGH.

27. Social Psychology. An analysis of the social self and of the psychological factors in the life of society. Introductory to sociological

and political theory. Parts of Baldwin's "Social and Ethical Interpretations in Mental Development," with lectures. Two hours. Second half year. Not given in 1907-98. Professor HOUGH.

28. The History of Political Theories. With special reference to the evolution of Civil Rights and Popular Sovereignty. Designed primarily for students in the College of the Political Sciences, but open to students in Columbian College who have passed in Philosophy "1." One hour per week throughout the year. Not given in 1907-08. Professor HOUGH.

30. Æsthetics. Lectures on the Principles of Art in general, as illustrated by those of poetry in particular. First half year. *Wed.*, at 4.50. Professor RAYMOND.

Third Section. Primarily for Graduates.

40. The Philosophy of Nature. Seminary course. The fundamental concepts of modern physical science; prescribed readings, reports, and a thesis. Professor STERRETT.

41. The Philosophy of Kant. A Seminary course covering Kant's three Critiques. Professor STERRETT.

42. Metaphysics. The Problems of Ontology, Cosmology, and Rational Psychology. Half year. Professor STERRETT.

43. The Philosophy of Religion. A lecture course with reports on prescribed readings and a thesis. Professor STERRETT.

44. The Philosophy of History. Seminary course. Conferences, prescribed readings and thesis. Dr. HARRIS.

45. Kant and Hegel. A Seminary course on their ethical theories. Professor STERRETT.

46. Æsthetics. Seminary course. Æsthetics, considered philosophically, historically, and practically. Conferences, prescribed readings, and thesis. Professor RAYMOND.

47. The Theory of the State. Graduate Conference. Special attention will be given to the theory of sovereignty. Part of Burgess's "Political Science," Vol. I, and Merriam's "History of the Theory of Sovereignty Since Rousseau," supplemented by reports upon collateral reading and discussions. Conferences, *Fri.*, 4.50 to 6.30. Two hours credit. First half year. Professor HOUGH.

48. The Principles of Political Obligation. (In sequence to Course 47.) The moral basis of the state, the grounds of political obligation, the moral ends served by civil law, and the system of public and private rights, will receive particular consideration. Green's "Principles of Political Obligation," with topical reference work and discussions. Conferences, *Fri.*, 4.50 to 6.30. Second half year. Professor HOUGH.

(Courses 47 and 48 are designed primarily for students in the College of the Political Sciences, but are open to duly qualified graduates of Columbian College.)

49. Educational Psychology. (See course 40 under "Education.") Professor HOUGH.

50. Crucial Problems in Psychology. Designed for graduates taking a major in psychology. Professor HOUGH.

51. Logic from the Genetic Standpoint. Studies in the latest developments of logical theory will be arranged for qualified graduates. Professor HOUGH.

52. Experimental Psychology. A Laboratory course, treating special topics in psychology, such as memory, time of mental processes, movement, sensation, emotion, etc. The topics selected for consideration in any year will be determined by the need of the students electing the course. Pre-requisite, Course 1, or its equivalent. Professor FRANZ.

53. Experimental Psychology. A research course. Open only to students who have taken or are taking Course 52 or its equivalent in another institution. Students will take up topics for original investigation under the direction of the instructor. Courses 52 and 53 will be given in the psychological laboratory of the Government Hospital for the Insane, which is well provided for psychological teaching and research. Professor FRANZ.

PHYSICS.

HOWARD L. HODGKINS, Ph.D.....*Professor*
EDWARD B. ROSA, Ph.D.....*Professor*
EDGAR BUCKINGHAM, Ph.D.....*Lecturer*
EVERETT W. VARNEY, A.B.....*Instructor*

First Section. Primarily for Undergraduates.

1. General Physics. A recitation and lecture course, embracing the fundamental principles of mechanics, sound, heat, light, and electricity. The lectures are illustrated by experiments. Plane trigonometry is used in the course, and only students who have completed or are studying a college course in trigonometry are admitted. *Mon., Wed., Fri.,* at 4.50. Professor HODGKINS.

2. Laboratory Physics. A selected series of experiments, mainly quantitative. This course is designed to familiarize the student with the ordinary methods of exact experimentation, and to extend the knowledge of the principles of physics as gained in Course 1. Two two-hour periods. *Tu., Th.,* at 10.30. Professor HODGKINS and Mr. VARNEY.

Second Section. For Undergraduates and Graduates.

20. Sound. A lecture and laboratory course. Three periods. *Mon.,* at 10.30; *Wed.,* at 10; *Fri.,* at 10.30. Professor HODGKINS.

21. Heat. A lecture and laboratory course, based on Preston's Theory of Heat and Poynting and Thomson's Heat. Three periods. *Mon.,* at 11.30; *Wed.,* at 11; *Fri.,* at 11.30. Professor HODGKINS.

22. Light. A lecture and laboratory course, based on Preston's Theory of Light and Schuster's Theory of Optics. Three periods. *Mon., Wed., Fri.,* at 5.40. Professor HODGKINS.

Third Section. Primarily for Graduates.

40. Light. Advanced study, experimental and mathematical, of some one branch of the subject. Professor HODGKINS.

41. Absolute Electrical Measurements. A course of lectures on the theory and practice of fundamental electrical measurements, including the more important methods for the measurement of resistance in absolute units, the absolute measurement of current and electromotive force, the determination of the ratio of the two systems of electrical units, the theory of various forms of condensers, the calculation of inductances from their dimensions, the experimental determination of capacities and inductances, and other important problems in electrical measurements. A brief history of the present electrical units and an account of the classical investigations by which their values have been determined will also be given. Professor ROSA.

42. Advanced Laboratory Work in Electrical Measurements. A course in advanced laboratory work in electrical measurements, for those who are qualified to undertake it. This may include a considerable range of work, or it may be research work on some important single subject. The amount and character of the work and the time and place at which it shall be done will be determined for each case separately. Professor ROSA.

43. Thermodynamics. The first term is devoted to the development of the theory and usual methods of thermodynamics for systems devoid of passive resistances. The second term is occupied with applications to problems in Physics and Physical Chemistry. Among the subjects discussed the following may be mentioned: Thermal properties of fluids, specific and latent heats, the plug experiment; change of state, heterogeneous dissociation, the phase rule; reactions in gas mixtures, homogeneous dissociation, theory of gas and other explosive engines; electromotive forces; thermodynamic properties of bodies in the electric or magnetic field; laws of radiation. Dr. BUCKINGHAM.

44. Theory of Electricity and Magnetism. Maxwell's Electricity and Magnetism is used as a text-book. In the later part of the year some use will be made of Heaviside's Electromagnetic Theory. Familiarity with the rudiments of vector analysis is desirable, but not essential. Dr. BUCKINGHAM.

PREVENTIVE MEDICINE.

GEORGE N. STERNBERG, M.D., LL.D.....*Professor*

Third Section. Primarily for Graduates.

40. Food preservatives in relation to the Public Health.

41. The hygienic results of milk sterilization.

42. The hygienic results of filtration of municipal water supplies.

43. The use of chemical agents for the sterilization of water supplies, municipal or domestic.

44. The results of legislative and philanthropic efforts to arrest the progress of tuberculosis in the United States, and especially in the principal cities.

ROMANCE LANGUAGES AND LITERATURES.

GEORGE N. HENNING, A.M.....*Professor*
OSCAR L. KEITH, A.M.....*Instructor*

FRENCH.

First Section. Primarily for Undergraduates.

1. Grammar, composition, drill in pronunciation. Fraser and Squair's French Grammar. Translation and reading of nineteenth century fiction and history. (400-500 pages.) For beginners. *Tu., Th., Sat.,* at 9.30. Mr. KEITH.

2. Parallel with Course 1. *Tu., Th., Sat.,* at 5.40. Mr. KEITH.

3. Translation and reading: Mérimée, *Colomba;* Sandeau, *Mlle de la Seiglière;* Daudet, *Trois Contes;* Sarcey, *le Siège de Paris;* A. France, *Sylvestre Bonnard;* Molière, *l'Avare;* Loti, *Ramuntcho;* Coppée, *le Pater;* for outside reading, Zeller, *Henri IV* or *Richelieu.* Grammar, composition, conversation; Fraser and Squair's French Grammar. Open to students who have passed in French 1 or 2, or have fufilled the admission requirements in Elementary French. *Mon.,* 10.30; *Wed.,* 10; *Fri.,* 10.30. Professor HENNING.

4. Parallel with French 3. *Tu., Th., Sat.,* at 4.50. Mr. KEITH.

6. General survey of French literature, seventeenth to nineteenth centuries. Translation, collateral reading and reports thereon, lectures

on literature and the history of the language, composition. Warren's French Prose of the Seventeenth Century, Canfield's French Lyrics, Lacombe's *Petite Histoire du peuple français,* Crane's *la Société française au XVII^e siècle,* Corneille, Molière, La Fontaine, Racine, Saint-Simon, Montesquieu, Marivaux, Voltaire, Rousseau, Beaumarchais, Hugo, Musset, Michelet, Balzac, Augier, Maupassant, Pailleron, A. France, Bornier, Daudet. Open to students who have passed in Course 3 or 4, or have fulfilled the admission requirements in Advanced French. *Mon., Wed., Fri.,* at 2.30. Professor HENNING.

Second Section. For Undergraduates and Graduates.

Courses in this group are open to students who have passed in Course 6, or who otherwise satisfy the instructor of their fitness to take them.

21. Seventeenth century literature; history, philosophy, criticism, memoirs, letters, eloquence, drama, fiction, poetry. Balzac, Descartes, Pascal, La Rochefoucauld, La Bruyère, Boileau, St. Simon, Mme. de Sévigné, Bossuet, Corneille, Racine, Molière, Fénelon, Malherbe, La Fontaine, etc. Translation, collateral reading and reports thereon, lectures on literature and history. Thesis. Not given in 1907-08. Given in 1908-09. Professor HENNING.

23. Eighteenth century literature; history, philosophy, criticism, letters, drama, fiction, poetry. Montesquieu, Diderot, Rousseau, Voltaire, Marivaux, Destouches, Sedaine, Beaumarchais, Bernardin de St. Pierre, André Chénier, etc. Translation, collateral reading and reports thereon, lectures on literature and history. Thesis. Not given in 1907-08.

25. Nineteenth century, literature; history, philosophy, criticism, memoirs, travels, fiction, drama, lyric poetry. Thierry, Michelet, Mignet, Thiers, Taine, Sainte-Beuve, Brunetière, France, Lemaître, Renan, Gautier, Mme. de Staël, Chateaubriand, Dumas père, Hugo, George Sand, Mérimée, Balzac, Flaubert, Daudet, Maupassant, Loti, de Musset, Dumas fils, Augier, Maeterlinck, Rostand, Lamartine, de Vigny, the Romantic poets, the Parnassians, the Symbolists, etc. Translations, collateral reading and reports thereon, lectures on literature and history. Thesis. *Mon.,* at 11.30; *Wed.,* at 11; *Fri.,* at 11.30. Professor HENNING.

26. French Romanticism; lyric poetry, fiction, drama, history, criticism. Translation, reading, lectures. This course may be taken only in conjunction with English 26. Given in 1907-08. Not given in 1908-09. *Tu., Th.,* 10.30. Professor HENNING.

Third Section. Primarily for Graduates.

43. Old French and philology. Darmesteter's Historical French Grammar. La Chanson de Roland, etc. Professor HENNING.

47. The comedies of Molière. Professor HENNING.

50. The Romantic Movement in France, with some reference to the same movement in England and Germany. Professor HENNING.

Other courses may be arranged for competent graduates.

SPANISH.

First Section. Primarily for Undergraduates.

1. Grammar, composition. Hills and Ford's Spanish Grammar. Translation and reading of nineteenth century fiction and drama. Open to first-year students only by permission of the instructor. Open only to students who have had at least one year of French or Latin. Students may not elect Spanish and Italian in the same year. *Tu., Th., Sat.,* at 10.30. Mr. KEITH.

Second Section. For Undergraduates and Graduates.

20. Translation and reading of nineteenth and seventeenth century works; history, fiction, drama, lyric poetry. Lectures on literature and history. Open to students who have passed in Course 1 with at least the grade of C, or who otherwise satisfy the instructor of their fitness to take the course. Given in 1907-08. *Tu., Th.,* 11.30. Professor HENNING.

ITALIAN.

First Section. Primarily for Undergraduates.

1. Grammar, composition. Grandgent's Italian Grammar, Bowen's Italian Reader. Translation and reading of nineteenth century fiction and drama. Open to first-year students only by permission of the instructor. Open only to students who have had at least one year of French or Latin. Students may not elect Italian and Spanish in the same year. Not given in 1907-08.

FRENCH CLUB.

The French Club, composed of instructors and advanced students in the department, and of alumni, has for its objects the study of French life, customs and history, and the use of the spoken language. Meetings are held monthly.

SEMITIC LANGUAGES AND LITERATURES.

FRANK LEIGHTON DAY, Ph.D.....*Professor*

First Section. Primarily for Undergraduates.

1. History of the Hebrews. This course covers the history of Israel from the beginning to the Maccabean Age, in successive steps: (*a*)

From the beginning to Solomon. (*b*) From Solomon to Nehemiah. *Tu., Th.,* at 10.30.

2. New Testament Times. Including the political, social, and religious life from B. C. 175 to A. D. 70. *Tu., Th.,* at 11.30.

3. Biblical Archæology.

4. History of the English Bible.

Second Section. For Undergraduates and Graduates.

20. A Course for Beginners in Hebrew. Including the acquisition of the grammatical principles of the language, the vocabulary, and careful reading of Genesis, chapters I-VIII. Harper's Introductory Hebrew Method and Elements of Hebrew are used as text-books. *Tu., Th., Sat.,* at 9.30.

21. Historical Hebrew. The Books of Kings, a critical translation; special attention given to vocabulary and syntax. This course is a continuation of Course 20.

22. Prophecy. Its History and Development. This course includes the special study of some of the prophetic books, with the life and times of the writers. *Mon.,* at 10.30; *Wed.,* at 10.

23. Priestly Element in the Old Testament. *Mon.,* 9.30; *Wed.,* 9.

24. The Psalms. A study of the Psalms as to date, structure, contents, and special teachings.

Third Section. Primarily for Graduates.

40. The Minor Prophets. A course for advanced students in Hebrew, including Hebrew lexicography, etymology, and syntax.

41. Jeremiah. The life and times of the writer and critical study of the book.

42. Religion of the Semites.

43. The wisdom literature in the Old Testament.

Other courses may be arranged for competent graduates.

SOCIOLOGY.

(See statement under Economics and Sociology.)

SPANISH.

(See statement under Romance Languages.)

ZOÖLOGY.

THEODORE NICHOLAS GILL, M.D., Ph.D., LL.D.....*Professor*
PAUL BARTSCH, M.S., Ph.D.....*Professor*
JULIA T. MACMILLAN.....*Assistant*

First Section. Primarily for Undergraduates.

1. Systematic Zoölogy. I. Invertebrates. This includes lectures and laboratory work. The lectures in their scope cover all the branches of Invertebrates, and correlated with these lectures is the study and dissection of typical specimens in each group. This course is intended to familiarize the student with biological characters, classificatory laws, and the general principles of evolution. Lecture, one hour; laboratory, two two-hour periods. *Mon. Wed., Fri.,* at 5.40. Professor BARTSCH.

2. Systematic Zoölogy. II. Vertebrates. This includes lectures and laboratory work. The lectures will cover the various branches of Vertebrata and correlated with these is the study and dissection of typical specimens of each group. Open only to students having completed Course 1. *Mon., Wed., Fri.,* at 4.50. Professor BARTSCH.

Second Section. For Undergraduates and Graduates.

20. Practical Zoölogy. A lecture course illustrated with lantern slides and demonstrations. In this course only beneficial and injurious animals of all classes will be considered, especial stress being laid upon the problems of preservation and extermination. The course aims to expound the economic side of zoölogy. Open to all students. One hour. Professor BARTSCH.

21. A Laboratory Course in Histology. This course is designed to acquaint the students with histological technique as well as the minute structure of the various organs composing the body of animals. Three hours. Professor BARTSCH.

22. A Laboratory Course in Physiology. This includes lectures and laboratory work. It considers the constituents of the body and the chemical changes which take place in the vital processes, as well as the secretions and excretions of the body. Professor BARTSCH.

23. Ornithology. A systematic course embracing lectures and laboratory work. The lectures are illustrated with lantern slides, showing the home life of birds. The laboratory work consists in classifying bird skins, of which the University possesses an excellent series. Special attention is directed to the study of the birds of the District of Columbia, and frequent field excursions are made to familiarize the student with the haunts and habits of these forms. Lecture, one hour; laboratory, one two-hour period. *Tu., Th.,* at 4.50. Professor BARTSCH.

24. Comparative Biology. This course consists of lectures and classroom demonstrations treating of the different functions and phenomena of life as they are exhibited in both animals and plants. The lectures are given by the Professor of Zoölogy and the Professor of Botany alternately. *Wed.,* at 4.50. Professors BARTSCH and MANN.

Third Section. Primarily for Graduates.

40. A general course of lectures on the principles of zoölogy, including a consideration of the philosophy, the methods of investigation, and the systems of zoölogy as determined by comparative anatomy. The lectures are supplemented by work in the laboratory, embracing histology, microtomy, and dissection. The student is required to take up some subject or group for original investigation.

The collections of the United States National Museum and the Smithsonian Institution are consulted in connection with all these courses.

EXAMINATIONS.

Examinations are conducted under the following rules of the Board of Trustees:

Examinations for degrees shall close at least three weeks before the end of the scholastic year, and the names of all candidates for degrees who have passed a successful examination shall be officially reported to the President at least two weeks before the date of the commencement.

No student shall be credited with an examination for promotion from a lower to a higher class or to a final examination who is in arrears for tuition.

LIBRARY FACILITIES.

A well-equipped reference library and reading-room is open to students from 9 a. m. to 7 p. m. It contains encyclopædias, dictionaries, standard works in the various departments of study comprised under University subjects, and the leading literary and scientific magazines and reviews. The Germanic Library of the late Professor Richard Heinzel, of the University of Vienna, recently acquired by the University, contains 7,200 volumes and pamphlets bearing on Germanic philology and literature, and a large number of works and periodicals in the cognate branches, especially Anglo-Saxon, Old English, the Romance languages and Slavic.

The Library of Congress is steadily perfecting its collections of standard works in the various branches of university study, and advanced and graduate students are there given every facility for pursuing their investigations. The Public Library of the District of

Columbia is being rapidly equipped with books of especial importance to students, and its facilities are available under the most favorable conditions. Under certain restrictions, the libraries of the governmental departments may also be utilized. All these libraries are within easy reach of the University.

FEES.

Arts and Sciences.

1. Matriculation fee (payable only on first entry into the University)	$5
2. Library fee per annum	2
3. Tuition fee per annum for regular undergraduate courses (12 hours or more per week) or for graduate courses during the years of required work	150
4. Laboratory courses:	
Material fees:	
Mineralogy	5
Botany; Chemistry, 2, 3, and 7; Electrical Engineering; Physics; Zoölogy; each	10
Chemistry, 4 (Assaying)	20
Chemistry, except 2, 3, 4, and 7, each	25
Deposits to cover breakage of apparatus issued, the amounts paid in excess of breakage to be returned:	
Chemistry, 2, 3, and 7, each	10
Chemistry, except 2, 3, 4, and 7, each	25
5. Fee for graduation	10
6. Tuition fees per annum, for all departments of the University, for special courses on the basis of hours per week throughout the year:	
One hour	25
Two hours	45
Three hours	60
Four hours	70
Five hours	80
Six hours	90
Seven hours	100
Eight hours	110
Nine hours	120
Ten hours	130
Eleven hours	140
7. Tuition fee for each of the following special courses, not taken by candidates for a degree	40
Architecture, Courses 37 and 38.	
Chemistry, Course 4 (Assaying).	

8. Tuition fee per annum for the special course in Architecture.. $100
9. Tuition fee per annum for a regular undergraduate course after four years of attendance at full tuition..... 75
10. In determining tuition fees, four hours of laboratory work in Architecture, three hours of laboratory work in Chemistry, and two hours of laboratory work in other subjects count as one hour.
11. Fee for a certificate under the seal of the University..... 2

No change will be made in the fees fixed at the time of registration except in the case of a change in or withdrawal from a course of studies, and then only upon notice in due form and from the end of the current quarter session when such change or withdrawal shall be approved. Applications for permission to change a course of studies or for the granting of a withdrawal should be made on the prescribed form to be obtained from the Registrar and will only be received at the end of a quarter session.

PAYMENT OF FEES.

All fees are to be paid to the Treasurer. Tuition fees are payable quarterly in advance. Matriculation, library, and laboratory fees are payable in full in advance.

BOARD AND ROOMS.

A register of approved boarding houses is kept by the Treasurer. Accommodations cost from $25 to $40 a month. Women students may apply to the Dean of Women.

HONORABLE DISMISSION.

An honorable dismission will always be issued to any student who has been granted a withdrawal from the University in good standing.

For catalogues, application blanks, and further information, address

THE REGISTRAR,
The George Washington University,
Washington, D. C.

Faculty of Medicine.

I. DEPARTMENT OF MEDICINE.

FACULTY.

(Arranged, with the exception of the President and the Dean, in the several groups in order of collegiate seniority.)

CHARLES WILLIS NEEDHAM, LL.D.....PRESIDENT OF THE UNIVERSITY
WILLIAM F. R. PHILLIPS, M.D.....Dean, Professor of Hygiene and of Practical Anatomy
* J. FORD THOMPSON, M.D.....Professor of Surgery
ALBERT F. A. KING, A.M., M.D., LL.D....Professor of Obstetrics and Dean Emeritus of the Faculty
GEORGE N. ACKER, A.M., M.D.....Professor of Pediatrics and of Clinical Medicine
HENRY C. YARROW, M.D.....Professor of Dermatology
D. KERFOOT SHUTE, A.B., M.D.....Professor of Anatomy and of Clinical Ophthalmology
WILLIAM P. CARR, M.D.....Professor of Surgery
STERLING RUFFIN, M.D.....Professor of Theory and Practice of Medicine and of Clinical Medicine
WILLIAM K. BUTLER, A.M., M.D.....Professor of Ophthalmology
THOMAS E. MCARDLE, A.M., M.D.....Professor of Minor Surgery
JOHN VAN RENSSELAER, A.B., M.D.....Professor of Clinical Surgery
CHARLES EDWARD MUNROE, Ph.D.....Professor of Chemistry
CHARLES W. RICHARDSON, M.D..Professor of Laryngology and Otology
GEORGE WYTHE COOK, M.D.....Professor of Clinical Medicine
J. WESLEY BOVEE, M.D.....Professor of Gynecology
THOMAS A. CLAYTOR, M.D.....Professor of Materia Medica and Therapeutics and of Clinical Medicine
A. R. SHANDS, M.D.....Professor of Orthopedic Surgery
JAMES CARROLL, M.D.....Professor of Bacteriology and Pathology
RANDOLPH B. CARMICHAEL, M.D....Professor of Clinical Dermatology
FRANCIS R. HAGNER, M.D.....Professor of Genito-Urinary Surgery and Venereal Diseases
JOHN B. NICHOLS, M.D.....Professor of Histology
WILLIAM C. WOODWARD, M.D., LL.M.....Professor of Medical Jurisprudence
ALBERT L. STAVELEY, M.D.....Clinical Professor of Gynecology

* On leave of absence.

WILLIAM A. WHITE, M.D.....Professor of Mental Diseases
CHARLES H. CLARK, M.D.....Professor of Nervous Diseases
I. W. BLACKBURN, M.D.. .....Professor of Morbid Anatomy
ARTHUR A. SNYDER.....Clinical Professor of Surgery
SHEPHERD IVORY FRANZ, Ph.D.....Professor of Physiology
EDWARD E. MORSE, M.D.....Assistant Professor of Obstetrics
EDWARD G. SEIBERT, M.D.....Assistant Professor of Chemistry
JULIAN M. CABELL, M.D.....Assistant Professor of Obstetrics
D. WEBSTER PRENTISS, M.D.....Assistant Professor of Histology
C. S. WHITE, M.D.....Assistant Professor of Physiology
JOSEPH M. HELLER, M.D.....Lecturer on Diseases of the Tropics
JOHN R. WELLINGTON, M.D.....Assistant Professor of Clinical Surgery
JOHN H. LINDSEY, M.D.....Assistant Professor of Clinical Medicine
NOBLE P. BARNES, M.D.....Lecturer on Materia Medica
DUFF G. LEWIS, M.D.....Assistant Clinical Professor of Surgery
JOHN T. KELLY, M.D.....Assistant Clinical Professor of Surgery
T. S. D. GRASTY, M.D.....Assistant Professor of Bacteriology and Pathology
H. H. DONNALLY, A.M., M.D..Assistant Professor of Bacteriology and Pathology
SAMUEL H. GREENE, JR., M.D.....Instructor in Anatomy
HOMER S. MEDFORD, M.D.....Instructor in Obstetrics
L. H. REICHELDERFER, M.D.....Instructor in Medicine
EDGAR P. COPELAND, M.D.....Instructor in Surgery
J. L. RIGGLES, M.D.....Instructor in Anatomy
H. C. MACATEE, M.D.....Instructor in Medicine
G. BROWN MILLER, M.D.....Instructor in Gynecology
W. A. FRANKLAND, M.D.....Instructor in Clinical Gynecology and Assistant Demonstrator of Anatomy
THOMAS M. PRICE, Ph.D.....Instructor in Bio-Chemistry
OTIS D. SWETT, B.S.....Instructor in Chemistry
L. H. TAYLOR, M.D.....Instructor in Surgery
HENRY R. ELLIOTT, M.D.....Instructor in Physiology
WALTER H. MERRILL, M.D.....Instructor in Electro-Therapeutics
B. M. RANDOLPH, M.D.....Instructor in Pharmacology
HURON W. LAWSON, M.S., M.D.....Instructor in Bacteriology and Pathology
O. A. M. MCKIMMIE, M.D.....Clinical Instructor in Laryngology and Ophthalmology
H. S. DYE, M.D.....Clinical Instructor in Laryngology and Ophthalmology
C. M. BEALL, M.D.....Instructor in Physical Diagnosis
H. C. COBURN, M.D.....Instructor in Physical Diagnosis
ELMER S. NEWTON, M.D.....Instructor in Chemistry
A. BARNES HOOE, M.D.....Instructor in Gynecology

WILBUR R. BRANDENBURG, M.D.....Demonstrator of Bacteriology and Pathology
GEORGE B. HEINECKE, M.D.....Assistant Demonstrator of Anatomy
EDWARD ELLIOTT RICHARDSON, M.D., M.S.....Assistant Demonstrator of Anatomy
HENRY M. JEWETT, M.D.....Assistant Instructor in Histology
J. LAWN THOMPSON, M.D.....Assistant Instructor in Surgery
TRUMAN ABBE, M.D.....Assistant Instructor in Physiology
CHARLES W. HYDE, M.D.....Assistant in Surgery
A. L. HUNT, M.D.....Assistant in Surgery
E. T. M. FRANKLIN, M.D.....Assistant in Surgery
W. J. FRENCH, M.D.....Assistant in Surgery
A. P. CLARK.....Assistant in Chemistry
JOHN P. FREY.....Assistant in Chemistry
E. P. MAGRUDER, A.M., M.D.....Assistant Demonstrator of Anatomy
DANIEL T. BIRTWELL, M.D.....Assistant Demonstrator of Anatomy
J. D. MURRAY, M.D.....Assistant Demonstrator of Anatomy
GLENN I. JONES, M.D.....Assistant Demonstrator of Anatomy
W. O. OWEN, M.D.....Assistant Demonstrator of Anatomy
W. E. CLARK, M.D.....Assistant in Bacteriology and Pathology

UNIVERSITY HOSPITAL.

VISITING STAFF.

*J. FORD THOMPSON, M.D.....Visiting Surgeon
W. P. CARR, M.D.....Visiting Surgeon
STERLING RUFFIN, M.D.....Visiting Physician
THOMAS A. CLAYTOR, M.D.....Visiting Physician
GEORGE N. ACKER, M.D.....Visiting Physician
A. F. A. KING, A.M., M.D., LL.D.....Visiting Obstetrician
HENRY C. YARROW, M.D.....Visiting Dermatologist
D. KERFOOT SHUTE, M.D.....Visiting Ophthalmologist
CHARLES W. RICHARDSON, M.D.....Visiting Laryngologist
J. WESLEY BOVEE, M.D.....Visiting Gynecologist
W. K. BUTLER, M.D.....Associate Visiting Ophthalmologist
JULIAN M. CABELL, M.D.....Associate Visiting Obstetrician
JAMES CARROLL, M.D.....Pathologist

OUT-PATIENT DEPARTMENT.

SURGICAL DISPENSARY.

J. L. RIGGLES, M.D.....In charge
E. L. MASON, M.D.....Assistant
C. W. HYDE, M.D.....Assistant
C. F. STEARNE, M.D.....Assistant

* On leave of absence.

MEDICAL DISPENSARY.

John H. Lindsey, M.D.....In charge
E. P. Copeland, M.D.....Assistant
W. A. Frankland, M.D.....Assistant
S. H. Greene, Jr., M.D.....Assistant
H. C. Coburn, M.D.....Assistant
B. M. Randolph, M.D.....Assistant
C. M. Beall, M.D.....Assistant
H. H. Donnally, M.D.....Assistant
C. W. Hyde, M.D.....Assistant

GYNECOLOGICAL DISPENSARY.

A. B. Hooe, M.D.....In charge
D. W. Prentiss, M.D.....Assistant
Samuel Fry, M.D.....Assistant
Adam Kemble, M.D.....Assistant

EYE, EAR, THROAT, AND NOSE DISPENSARY.

E. G. Seibert, M.D.....In charge
C. L. Billard, M.D.....Assistant

GENITO-URINARY DISPENSARY.

Henry R. Elliott, M.D.....In charge

SKIN DISEASE DISPENSARY.

Randolph B. Carmichael, M.D.....In charge

GENERAL STATEMENT.

In the chronological order of establishment the Department of Medicine of The George Washington University is the seventeenth Medical School in the United States. The first course of lectures began in March, 1825. For many years the school was known as the National Medical College; subsequently as the Department of Medicine of the Columbian University. By virtue of an Act of Congress approved January 23, 1904, the Columbian University changed its name to "The George Washington University."

When first established, and for many years thereafter, this school, like most others in this country, gave only a two years' course of five months each. In 1878 the course was lengthened by the establishment of a Spring Session, devoted to lectures in certain special subjects.

Again in 1879 the course was lengthened to seven months and attendance upon three annual sessions required; in 1893 attendance upon four regular courses was made obligatory upon all candidates for the degree of Doctor of Medicine. The present course of instruction for the degree of Doctor of Medicine extends through four years of eight months each. In order to increase the facilities for actual bedside teaching, the University Hospital was established in 1898 and made a part of the Department of Medicine. In 1902 the old building, in which the exercises had been held since 1867, gave place to the present enlarged and commodious structure.

The academic year begins on the last Wednesday in September and ends on the first Wednesday in June. The next session, the eighty-seventh, begins September 25, 1907, and ends June 3, 1908. Students must register their names promptly at the Registrar's office at the beginning of the session, in order that their time of study shall count as a full year. Degrees are conferred at Commencement, the first Wednesday in June; at the Fall Convocation, the second Wednesday in October, and at the Winter Convocation, February 22.

For catalogues and other information address either the Registrar of the University or the Dean of the Department of Medicine, The George Washingtn University, Washington, D. C.

ADMISSION.

Candidates for matriculation must show that they are fitted by previous education to study medicine.

Advanced Requirements After 1909.

Beginning with the session of 1909-10 no student will be matriculated for the degree of Doctor of Medicine (*a*) who has not completed satisfactorily in an approved college or scientific institution two years of work of a regular course for a baccalaureate degree or (*b*) who does not possess equivalent educational training and acquirements.

Applications for matriculation will be required (*a*) to submit certificates, duly authenticated, of the college or scientific institution in which their work was done, setting forth the courses taken and the grades attained or (*b*) to pass satisfactorily examinations equivalent to the final examinations in subjects of the sophomore year of approved colleges or scientific institutions and aggregating fifteen units. In both cases, (*a*) and (*b*), one unit must be in physics and one unit in chemistry.

Admission Without Examination.

Candidates are admitted without examination:

(1) Upon presenting a diploma or certificate of an approved college conferring on them the degree of A.B. or B.S., or an equivalent degree in the arts and sciences.

(2) Upon presenting a diploma or certificate of graduation from a high school, academy, or preparatory school approved by the University as maintaining an adequate standard.

(3) Upon presenting a certificate of admission to the freshman class of an approved college.

(4) Upon presenting a medical student's certificate issued by a State board.

(5) Upon presenting a certificate of admission to another medical school approved by the University as maintaing an adequate standard.

Admission by Examination.

Candidates unable to comply with the foregoing requirements are admitted upon passing an examination based upon the general requirement for admission to the Freshman Class of the Columbian College of the University, which is a four-year high school course, or its equivalent. This examination comprises subjects selected from the annexed list equal to 15 units. For admission to the Department of Medicine nine (9) of the 15 units are required in the following subjects:

	Units.
English	4
Mathematics	3
Physics	1
Latin, French, or German	1
Total	9

The other 6 units may be selected from the other subjects. A unit is considered the equivalent of one year's high school work in a subject.

List of Subjects.

English:	Units.
(*a*) Grammar	1
(*b*) Rhetoric and Composition	1
(*c*) Literature—a knowledge of the form, subject-matter, and literary history of prescribed works is required	2

The following are the works prescribe dfor 1907-08: Burke's *Speech on Conciliation,* Macaulay's *Essay on Milton,* Macaulay's *Life of Johnson,* Milton's *L'Allegro, Il Penseroso, Comus,* and *Lycidas;* Shakespeare's *Julius Cæsar.* Equivalent readings may be offered.

	Units.
Latin:	
(*a*) Elementary Grammar	1
(*b*) Cæsar's Commentaries, Books I-IV	1
(*c*) Advanced Latin	2
Greek:	
(*a*) Elementary Grammar	1
(*b*) Xenophon or Homer	1
(*c*) Advanced Greek	1
Modern Languages:	
(*a*) Elementary French Grammar	1
(*b*) French, translation of easy prose	1
(*c*) Elementary German Grammar	1
(*d*) German, translation of easy prose	1
History:	
United States	1
English	1
Greek or Roman	1
General	1
Mathematics:	
(*a*) Algebra through quadratics	1½
(*b*) Plane Geometry	1
(*c*) Plane Trigonometry	½
(*d*) Advanced Mathematics	1
Sciences:	
Physics	1
Chemistry	1
Astronomy	½
Biology	1
Geology	½
Botany	1

Sciences—*continued.*	Units.
Physical Geography	½
Physiology	½
Ethics	½
Economics	½

The scope of the different subjects is indicated by standard high school text books.

Candidates may offer other subjects than those stated in the foregoing list of subjects, and if they are acceptable examinations will be arranged. A candidate may offer certificates of an approved school for work done in any of the foregoing subjects, and will be credited with the units represented by such work. A candidate failing to pass in two of the subjects of his examination may be admitted to the first year upon the condition that he make up the deficiency before entering the second-year class. The examinations are conducted by examiners appointed by the Superintendent of Schools of the District of Columbia.

As the laws relating to the preliminary educational qualifications required of students of medicine differ in many of the States of the Union, candidates are advised to make themselves familar with the provisions of the medical statutes of the States in which they contemplate applying for license to practice. Attention to this precaution may save future embarrassment.

Examinations for admission to the first-year Medical class will be held in Hall No. 2 of the Medical Building, in accordance with the following schedules:

May 27 and September 16, 10 a. m., English.
May 28 and September 17, 10 a. m., Mathematics.
May 29 and September 18, 10 a. m., Physics.
May 31 and September 19, 10 a. m., Latin.
June 1 and September 20, 10 a. m., Electives.

ADMISSION OF STUDENTS FROM OTHER SCHOOLS.

Students of other recognized and approved medical schools may be admitted to this school as follows:

Those qualified to enter the second year of their own school may be admitted to the second-year class of this school; those qualified to enter the third year of their own school to the third year of this school, and those qualified to enter the fourth year of their own school to the fourth years of this school: Provided, however, that the subjects pur-

sued by the applicants in their previous year or years are reasonably equivalent to those required in the same year or years of this school, and that the requirements for advancement from class to class are the equivalent of those in this school. Applicants may be required to submit to examination in all the subjects pursued by the previous class of this school.

ADVANCED STANDING.

No advanced standing can be given for degrees in Dentistry, Veterinary Medicine, or Pharmacy.

Students holding degrees in Arts, Science, or Philosophy, who in the course of study for their degrees have pursued studies in chemistry, physiology, anatomy, histology, bacteriology, or pathology, equivalent to the courses in these subjects in this school, may upon satisfactory evidence of their proficiency be credited with such studies.

SPECIAL STUDENTS.

Students, approved by the Dean, not candidates for the degree of Doctor of Medicine, may be admitted without examination to pursue any course they may elect. Such courses cannot, however, be subsequently considered as time spent in the course for the degree of Doctor of Medicine. Nor can such students enter upon the regular medical course without complying with all the regular requirements for admission.

WITHDRAWALS.

A certificate of work actually done will be given to any student wishing to withdraw or transfer to some other school during the session. Written notice of such withdrawal or transfer must be filed with the Dean at the time of requesting the certificate, and the student must have paid all fees and dues chargeable against him up to the end of the quarter in which he withdraws.

CLASSIFICATION OF STUDENTS.

Students are divided into four classes, according to their proficiency, and the time spent, viz., first year, second year, third year and fourth year. Students cannot advance to a higher class with more than one major and one minor condition. Students failing in any subject or subjects may be permitted at the next examination period a re-examination in the subjects in which they fail. The Faculty may dimiss any student from the school, if in its judment such student be deemed an unsuitable person, intellectually or otherwise for the profession of medicine.

ORDER OF INSTRUCTION.

A change in the arrangement of the subjects of the curriculum went into effect with the session of 1905-06. This change was made in order to secure a more logical correlation of the subjects, enabling the student to utilize his time to better advantage.

The subjects studied in each year are shown in the following table:

First Year.	Second Year.	Third Year.	Fourth Year
Anatomy.	Organic and Physiological Chemistry.	Practice.	Clinical Medicine.
Histology.	Bacteriology.	Surgery.	Clinical Obstetrics.
Physiology.	Pathology.	Obstetrics.	Clinical Surgery.
General Chemistry.	Materia Medica.	Therapeutics.	Laryngology.
	Pharmacology.	Gynecology.	Otology.
	Hygiene.	Medical Jurisprudence.	Ophthalmology.
	Clinical Microscopy.	Clinics.	Dermatology.
	Physical Diagnosis.		Psychiatry.
			Pediatrics.
			Neurology.
			Tropical Diseases.

The greater part of the fourth year is devoted to clinical work in the hospitals. During this year, however, general instruction is also given in Mental Diseases, Neurology, Dermatology, Ophthalmology, Laryngology, and Otology. Not less than 1000 hours of clinical work are required.

Examinations are held at the end of each course.

Optional Five-Year Course.

Since the session of 1904-05 a five-year optional course has been offered. In this course the subjects, selected from the regular four-year course, are as follows:

First year.	Second year.	Third year.	Fourth year.	Fifth year.
Anatomy.	Physiological and organic Chemistry.	Bacteriology.	Practice.	Clinical Medicine.
Histology.	Physiology.	Pathology.	Surgery.	Clinical Obstetrics.
General Chemistry.	Materia Medica.	Hygiene.	Obstetrics.	Clinical Surgery.
	Pharmacology	Therapeutics.	Gynecology.	Laryngology.
		Medical Jurisprudence.		Otology.
		Clinical Microscopy.		Ophthalmology.
		Physical Diagnosis.		Dermatology.
				Psychiatry.
				Pediatrics.
				Neurology.
				Tropical Diseases.

This course requires an average of not less than 800 hours annually.

ANATOMY.

D. Kerfoot Shute, A. B., M.D.....*Professor of Anatomy*
W. F. R. Phillips, M.D....*Assistant Professor of Practical Anatomy*
Geo. B. Heinecke, M.D.....*Assistant Demonstrator of Anatomy*
E. E. Richardson, M.D., M.S.....*Assistant Demonstrator of Anatomy*
W. A. Frankland, M.D.....*Assistant Demonstrator of Anatomy*
S. H. Greene, Jr., M.D.....*Instructor in Anatomy*
J. L. Riggles, M.D.....*Instructor in Anatomy*

E. P. Magruder, A.M., M.D.....*Assistant Demonstrator of Anatomy*
J. D. Murray, M.D.....*Assistant Demonstrator of Anatomy*
Glenn I. Jones, M.D.....*Assistant Demonstrator of Anatomy*
W. O. Owen, M.D.....*Assistant Demonstrator of Anatomy*
Daniel T. Birtwell, M.D.....*Assistant Demonstrator of Anatomy*

The course in Anatomy is given in a series of lectures, demonstrations, recitations from text-books, and practical laboratory work. The purpose of the lectures is to prepare the student for his practical work in the laboratory. The lectures are illustrated by lantern slides, models, charts, and diagrams. The class is divided into small sections for the purpose of demonstrating the bones, joints, actual dissections, and frozen sections. The student is required to dissect satisfactorily one lateral half of the cadaver. Throughout the course every opportunity is taken to emphasize the application of Anatomy to the practice of medicine in all its departments. The course is practically completed in the first year, but, realizing the fundamental importance of anatomy to medicine, review recitations and demonstrations are provided weekly during the second year.

Text-books: Cunningham's Text-book of Anatomy, Gray's Anatomy, Cunningham's Manual of Practical Anatomy.

Collateral reading: Quain's Anatomy, Spalteholz's Anatomy, Taylor's Applied Anatomy, Wiedersheim's Structure of Man.

HISTOLOGY.

John B. Nichols, M.D.....*Professor of Histology*
D. Webster Prentiss, M.D.....*Assistant Professor of Histology*
Henry M. Jewett, M.D.....*Assistant Instructor in Histology*

Instruction in Histology is given in the first half of the first year. The minute structure of the tissues and organs of the body is presented in a systematic course of lectures illustrated by means of the projection microscope and by the study of specimens under the microscope. Recitations are held upon the subjects shown and studied. Practical instruction is given in microscopical technique, the care and manipulation of the microscope, and the preparation of specimens.

Text-book: Nichols's Histology.

Collateral reading: Böhm and von Davidoff's Histology, Stohr's Histology.

PHYSIOLOGY.

SHEPHERD IVORY FRANZ, Ph.D.....*Professor of Physiology*
C. S. WHITE, M.D.....*Assistant Professor of Physiology*
H. C. ELLIOTT, M.D.....*Instructor in Physiology*
TRUMAN, ABBE, M.D.....*Assistant Instructor in Physiology*

The course in Physiology consists of lectures, recitations, conferences, demonstrations, and laboratory exercises, during the second half of the first year. The lectures cover all the important facts and theories regarding bodily functions, and are illustrated by diagrams, models, and prepared specimens. Recitations are held on assigned parts of the text-book. Conferences are held weekly on special physiological topics, and for these exercises each student is required to prepare one thesis during the semester. In the laboratory each student performs a number of experiments on blood, on the circulation, on digestion, on the general functions of muscle and nerve, on the nervous system, and on the special senses. The student is required to make and keep records of the experiments, and these are criticized by the instructors. The class is divided into sections so that each student receives a large amount of personal attention. After the course in Normal Physiology, a series of review exercises is held in which special emphasis is laid on the relation of normal physiological function to the disturbances of function in disease, and upon the physiological action of drugs. It is intended in this way to bring the work of the Physiological Laboratory and other exercises into closer relation with the succeeding courses in Pathology, Therapeutics, and General Medicine.

Text-book: Howell's Physiology.

Collateral reading: Schafer's Physiology, Landois' Physiology, American Text-book of Physiology, Stewart's Physiology.

CHEMISTRY.

CHARLES E. MUNROE, Ph.D....*Professor of Chemistry and Toxicology*
EDWARD G. SEIBERT, M.D.....*Assistant Professor of Chemistry*
THOMAS M. PRICE, Ph.D.....*Instructor in Bio-Chemistry*
OTIS D. SWETT, B.S.....*Instructor in Chemistry*
ELMER S. NEWTON, M.D.....*Instructor in Chemistry*
ALBERT P. CLARK.....*Assistant*
JOHN P. FREY.....*Assistant*

General Chemistry. A series of illustrated lectures accompanied by recitations and exercises, on theoretical, inorganic, organic, and technical chemistry. *Tu., Th., Sat.,* at 4.50 p. m. Professor MUNROE, Mr. SWETT.

Organic Chemistry. A series of lectures and recitations on the acyclic and cyclic hydrocarbons and their derivatives, with special reference to physiology and medicine. *Tues., Fri.,* at 8.00 a. m. Professor MUNROE.

Physiological Chemistry. A series of lectures and recitations on the proximate principles of the human body, such as the proteids, carbohydrates, fats, and the relation of the chemical constitutions of these bodies to physiological processes, together with a consideration of the principal secretions and excretions of the human body. Assistant Professor SEIBERT.

Analytical Chemistry. A brief course in qualitative and quantitative analysis, with a view to acquainting the student with those methods which may be applied in medicine and the special tests for the alkaloids. Professor MUNROE, Assistant Professor SEIBERT, Assistants CLARK and FREY.

Clinical Analysis. A laboratory course covering urinanalysis, examinations of the gastric fluid, analyses of milk and of water, a study of alkaloidal reactions, and a practical examination of the chemical properties of the substances treated of in the course of physiological chemistry. Professor MUNROE, Assistant Professor SEIBERT, Assistants CLARK and FREY.

Volumetric Analysis. A brief laboratory course, introducing acidimetry and alkalimetry as a basis for quantitative examination of water, urine, and gastric fluids. Professor MUNROE and Dr. NEWTON.

Text-books: Holland's Medical Chemistry and Toxicology, Long's Text-books of Physiological Chemistry, Platt's Manual of Qualitative Analysis and Medical Chemistry.

Collateral reading: Simon's Manual of Chemistry, Hammarsten's Physiological Chemistry, Richter's Organic Chemistry, Barker's Textbook of Elementary Chemistry.

ADVANCED WORK.

Bio-Chemistry. A laboratory course in the chemical examination of some of the chief foodstuffs, the tissues and fluids of the body, and the products of certain organisms; also the isolation of the digestive enzymes and a study of their action *in vitro.* Dr. PRICE.

MATERIA MEDICA AND THERAPEUTICS.

THOMAS A. CLAYTOR, M.D.....*Professor of Materia Medica and Therapeutics*
NOBLE P. BARNES, M.D.....*Lecturer on Materia Medica*
WALTER H. MERRILL, M.D.....*Instructor in Electro-Therapeutics*
B. M. RANDOLPH.....*Instructor in Pharmacology*

This course is given in the second and third years.

Second year. (1) Lectures upon Materia Medica, including a demonstration of drugs and their preparations. (2) Recitations upon the preparations, their doses, and the various antidotes for poisons. (3) Practical exercises in prescription writing. (4) Demonstrations in the laboratory illustrating the physiological action of the more important drugs. (5) An optional course in Pharmacy is offered.

Third year. (1) Systematic lectures upon the physiological action of drugs and their effects in health and disease, their therapeutic uses, and their methods of administration. (2) Lectures and section demonstrations in electro-therapeutics. (3) Prescription writing, in which the students are given hypothetical cases for which to prescribe, the prescriptions being reported before the class for criticism and discussion.

Text-books: Wood's Therapeutics, Wilcox's Materia Medica and Pharmacy.

Collateral reading: Hare's Practical Therapeutics, Culbreth's Materia Medica and Pharmacy, Cushney's Pharmacology, Osborne's Introduction to Pharmacology and Medicine.

BACTERIOLOGY AND PATHOLOGY.

James Carroll, M.D.....*Professor of Bacteriology and Pathology*
T. S. D. Grasty, M.D.....*Assistant Professor of Bacteriology and Pathology*
H. H. Donnally, A.M., M.D.....*Assistant Professor of Bacteriology and Pathology*
Huron W. Lawson, M.S., M.D.....*Instructor in Bacteriology and Pathology*
Wilbur R. Brandenburg, M.D.....*Demonstrator of Bacteriology and Pathology*
W. E. Clark, M.D.....*Assistant*

The course in Bacteriology and Pathology is given in the second year.

In Bacteriology the work includes (1) the preparation of the various culture media, (2) the principles of disinfection and sterilization, and (3) the methods of cultivating, staining, and studying bacteria. Special attention is given to the pathogenic organisms.

The latter half of the session is devoted to Pathology. After the detailed study of inflammation, the diseases of the various organs are taken up in succession. For this purpose sections illustrating the various pathological conditions are carefully selected and given to the student to be stained, mounted, and studied under the immediate supervision of an instructor. These sections become the property of the student. The course terminates with the microscopical study of the several varieties of tumors.

A course in Clinical Microscopy is given at the conclusion of that in Pathology. It embraces the study of fresh and stained preparations of human blood in normal and pathological conditions; the Widal test for typhoid fever; the developmental stages of the malarial parasites in the blood and in the mosquito; the common forms of intestinal parasites and the microscopical examination of the urine.

Text-books: Abbott's Principles of Bacteriology, Durch's General Pathology, Ziegler's Pathological Anatomy.

ADVANCED WORK.

Advanced students who desire to continue the work are encouraged to undertake bacteriological and pathological studies of the cases that come to autopsy.

HYGIENE.

W. F. R. PHILLIPS, M.D.....*Professor of Hygiene*

The course in Hygiene is given principally by recitation from a prescribed text-book. Consideration is given to domestic and municipal sanitation and to the principles underlying legislative interference in matters of public health. The subject is taught in the second year.

Text-book: Harrington's Hygiene.

Collateral reading: Notter and Firth's Hygiene.

SURGERY.

* J. FORD THOMPSON, M.D.....*Professor of Surgery*
W. P. CARR, M.D.....*Professor of Surgery*
THOS. E. MCARDLE, M.D.....*Professor of Minor Surgery*
A. R. SHANDS, M.D.....*Professor of Orthopedic Surgery*
E. P. COPELAND, M.D.....*Instructor in Surgery*
L. H. TAYLOR.....*Instructor in Surgery*
J. LAWN THOMPSON, M.D.....*Instructor in Surgery*
CHARLES W. HYDE, M.D.....*Assistant in Surgery*
A. L. HUNT, M.D.....*Assistant in Surgery*
W. J. FRENCH, M.D.....*Assistant in Surgery*
E. T. M. FRANKLIN, M.D.....*Assistant in Surgery*

The instruction given in this course embraces systematic lectures upon the principles and practice of surgery. Recitations are held twice a week, in which the subjects presented by the lecturer are impressed upon the students. The different surgical operations are illustrated upon the cadaver, and the uses of all the important surgical instruments and appliances are demonstrated in the same manner.

* On leave of absence.

Minor Surgery. Practical instruction is given in the application of splints, bandages, and dressings used in the various surgical diseases and injuries. Instruction is also given in the preparation of materials used in antiseptic and aseptic surgery, the preparation of the patient, sterilization of the instruments, and the methods of administering anesthetics.

Orthopedics. A course of lectures and recitations on the pathology, etiology, course, and termination of chronic joint diseases.

Surgical Pathology. A systematic series of demonstrations upon the pathological anatomy of surgical diseases and injuries is given. These demonstrations are supplemented by reference to microscopical specimens, charts, photographs, and diagrams.

Text-books: Brewer's Surgery, Walsham's Surgery, and Wharton's Minor Surgery.

Collateral reading: von Bergmann's System of Surgery, Park's Surgery by American Authors.

CLINICAL SURGERY.

* J. Ford Thompson, M.D.....*Professor of Clinical Surgery*
W. P. Carr, M.D.....*Professor of Clinical Surgery*
Charles W. Richardson, M.D.....*Clinical Professor of Laryngology*
John Van Rensselaer, A.B., M.D.....*Clinical Professor of Surgery*
W. K. Butler, M.D.....*Clinical Professor of Ophthalmology*
D. Kerfoot Shute, A.B., M.D.....*Clinical Professor of Ophthalmology*
A. R. Shands, M.D.....*Clinical Professor of Orthopedic Surgery*
Francis R. Hagner, M.D.....*Professor of Genito-Urinary Surgery*
John R. Wellington, M.D.....*Assistant Clinical Professor of Surgery*
Arthur A. Snyder, M.D.....*Clinical Professor of Surgery*
Duff G. Lewis.....*Assistant Clinical Professor*
John T. Kelly.....*Assistant Clinical Professor*
L. H. Taylor, M.D.....*Clinical Instructor in Surgery*

General Surgery. In the third year amphitheater clinics are given, at which the general principles of surgical diagnosis and of operative technique and procedure are emphasized and illustrated.

General and Special Surgery. In the fourth year the class is divided into sections for the study and examination of surgical cases in the hospital wards. The students are also assigned to work a dressers and assistants on the surgical out-patient departments of the different hospitals. Practical work is required of each student in preparation of dressings, sterilization of instruments, and operations on the cadaver. In the latter part of the year each student is given an opportunity to

* On leave of absence.

assist at a major operation. The clinical work is supplemented by the study and discussion of case histories.

In ophthalmology, otology, and laryngology the students are required to attend a certain number of clinics, and each student must report upon one assigned case.

In orthopedics they are required to take clinical instruction in the application of special apparatus and of plaster of paris to the correction of deformities.

Instruction in genito-urinary surgery and in cystoscopy is given in clinics in section work and by recitations from text-book.

OBSTETRICS.

ALBERT F. A. KING, A.M., M.D., LL.D.....*Dean Emeritus, Professor of Obstetrics.*
JULIAN M. CABELL, M.D.....*Assistant Professor of Obstetrics*
EDWARD E. MORSE, M.D.....*Assistant Professor of Obstetrics*
H. S. MEDFORD, M.D.....*Instructor in Obstetrics*

The course in Obstetrics comprises a series of lectures on the science and art of midwifery, and is given in the third year. The chief purpose of the lecturer is to arrange, simplify, and explain the matters studied in the text-books so as to render them more easily intelligible and to indicate their relative importance. The lectures are illustrated by diagrams, models, manikins, natural preparations, and instruments. The class is divided into sections, and each student performs various obstetrical operations upon the manikin and receives practical instruction in external pelvimetry and the methods of abdominal palpation and auscultation during pregnancy. Recitations from text-books are held throughout the term. In the fourth year clinical instruction in obstetrics is given, the class being divided into small sections and each section being required to attend a stated number of cases.

Text-book: King's Manual of Obstetrics.

Collateral reading: Hirst's Obstetrics, Williams' Obstetrics, Jewett's Practice of Obstetrics.

THEORY AND PRACTICE OF MEDICINE.

STERLING RUFFIN, M.D.....*Professor of Theory and Practice*
L. H. REICHELDERFER, M.D.....*Instructor in Medicine*
H. C. MACATEE, M.D.....*Instructor in Medicine*
C. M. BEALL, M.D.....*Instructor in Physicial Diagnosis*
H. C. COBURN, M.D.....*Instructor in Physical Diagnosis*

The method of instruction employed in this subject is as follows: (1) Lectures with weekly recitations. (2) Clinical lectures at the

University Hospital, with practical instructions in the art of diagnosis and methods of taking and recording the history of medical cases. (3) Laboratory instruction in the use of instruments of research for the clinical study of sputum, blood, feces, etc. (4) A course of lectures to the class in physical diagnosis.

Text-books and works of reference: Osler's Practice of Medicine, Tyson's Practice of Medicine, Anders' Practice of Medicine, Sahlinger and Kalteyer's Modern Medicine, Hare's Practical Diagnosis, Musser's Clinical Diagnosis, Simon's Clinical Diagnosis, Klemperer's Clinical Diagnosis, Cabot's Clinical Examination of the Blood.

CLINICAL MEDICINE

GEO. N. ACKER, A.M., M.D.....*Professor of Clinical Medicine*
G. WYTHE COOK, M.D.....*Professor of Clinical Medicine*
THOS. A. CLAYTOR, M.D.....*Professor of Clinical Medicine*
STERLING RUFFIN, M.D.....*Professor of Clinical Medicine*
JOHN H. LINDSEY, M.D.....*Assistant Clinical Professor of Medicine*
H. C. MACATEE, M.D.....*Clinical Instructor in Medicine*

Clinical Medicine is taught during the third and fourth years. Instruction is given by means of clinical lectures, ward classes, actual bedside work by the students, and conferences at which the cases studied are thoroughly discussed.

The work for the third and fourth years is graded and distinct.

Third year: The class is divided into sections, and weekly each section receives instruction in clinical diagnosis. An amphitheater clinic is given weekly, at which methods of diagnosis and treatment are presented and the use of instruments of precision illustrated and explained.

Fourth year: The class is divided into sections of two students each. These sections, under the direction of instructors, are held responsible for the conduct of the cases assigned them. They are required to obtain the histories, make the physical examination, determine the diagnosis, and institute the treatment; they also make the necessary clinical laboratory examinations.

Weekly conferences are held, at which the cases studied by the sections are presented and discussed under the supervision of the clinical teachers.

Amphitheater clinics are given, at which interesting or unusual cases are presented and explained by the clinical professors.

The clinical instruction is also supplemented by the study and discussion of case histories.

GYNECOLOGY.

J. Wesley Bovee, M.D.....*Professor of Gynecology*
G. Brown Miller, M.D.....*Instructor in Gynecology*
A. L. Staveley, M.D.....*Professor of Clinical Gynecology*
W. A. Frankland, M.D.....*Instructor in Clinical Gynecology*
A. Barnes Hooe, M.D.....*Instructor in Gynecology*

The subject of Gynecology is taught in the third year in a course of lectures and text-book recitations. In the fourth year the class is taken in sections of one to two students each into the Gynecological Dispensaries for clinical instruction in examinations, diagnosis, and treatment. In larger sections the class attends amphitheater clinics given by the Professors of Gynecology and Clinical Gynecology.

Text-books: Bovee's Practice of Gynecology, Hirst's Diseases of Women.

Collateral reading: Dudley's Gynecology, Penrose's Diseases of Women, Montgomery's Text-book of Gynecology.

NERVOUS DISEASES.

Charles H. Clark, M.D.....*Professor of Nervous Diseases*

Lectures and clinics are given upon the more common and important nervous affections. This course is given in the fourth year.

Text-book: Oppenheim's Nervous Diseases.

LARYNGOLOGY AND OTOLOGY.

Charles W. Richardson, M.D..*Professor of Laryngology and Otology*
O. A. M. McKimmie, M.D.....*Clinical Instructor in Laryngology and Otology*
H. S. Dye. M.D.....*Clinical Instructor in Laryngology and Otology*

This course, given in the fourth year, comprises lectures and clinical instruction on diseases of the nasal passages, pharynx, larynx, and also the ear. Practical demonstrations are given in the use of the laryngoscope and other instruments required in these special branches.

Text-books: Kyle's Diseases of the Nose and Throat, Dench's Diseases of the Ear.

OPHTHALMOLOGY.

W. K. Butler, M.D.....*Professor of Ophthalmology*

A course of lectures on this subject is given in the fourth year. The chief object is to direct attention to the elementary principles of the subject. It is not intended to qualify the student as a specialist. The course is supplemented by clinical instruction.

Text-book: May's Diseases of the Eye.

DERMATOLOGY.

H. C. Yarrow, M.D.....*Professor of Dermatology*
R. B. Carmichael, M.D.....*Clinical Professor of Dermatology*

The lectures on this subject are illustrated by diagrams, models, photographic illustrations of disease from life, and also by the exhibition of cases. In connection with the course clinical instruction is given.. This subject is taught in the fourth year.

Text-book: Jackson's Diseases of the Skin.

MENTAL DISEASES.

William A. White, M.D.....*Professor of Mental Diseases*

A series of lectures and clinics is given upon the subject of insanity in its varied forms. This course is given in the fourth year.

Text-book: Kraepelin's Clinical Psychiatry.

Collateral reading: Paton's Psychiatry.

MEDICAL JURISPRUDENCE.

W. C. Woodward, M.D.....*Professor of Medical Jurisprudence*

This course is given in the third year, and is designed to familiarize students with the rights and obligations of physicians, both legal and ethical, and to qualify them to apply the facts of medical science to the solution of problems in law.

Text-book: Reese's Medical Jurisprudence and Toxicology.

PEDIATRICS.

George N. Acker, A.M., M.D.....*Professor of Pediatrics*
Edgar P. Copeland.....*Instructor in Pediatrics*

In the fourth year didactic and clinical lectures are given upon diseases of infants and children and the importance of the proper management of these diseases by diet and hygiene.

Text-book: Holt's Diseases of Infants and Children.

MORBID ANATOMY.

I. W. Blackburn, M.D.....*Professor of Morbid Anatomy*

The instruction in this course will be mainly practical, consisting of post-mortem examinations, demonstrations, and illustrative lectures pertaining to the subjects of morbid anatomy and special pathology. Especial attention will be paid to the study of the gross pathology of

diseases of the brain and nervous system. Instruction in the technique of post-mortem examinations for scientific purposes and in medico-legal cases will be a feature of the course. This course will be given during the fourth year.

EXAMINATIONS.

Examinations are held at the end of the course in each subject. Students failing in examination will be permitted to be re-examined at the next regular examination period. Students failing in re-examination in a major subject must repeat the subjects in which they do not attain a grade of 80 or more. Students failing to appear at the regular examinations will not be examined until the next regular examination, except by special permission of the Faculty, and in this event an extra fee of $5.00 will be charged. Students failing to pass satisfactorily their practical laboratory examinations will be required to repeat the laboratory courses and pay the regular laboratory fees. Students will not be admitted to examination unless they have paid all fees due at the time or present a permit signed by the Treasurer. In order to avail themselves of the privilege of re-examination students must file their applications with the Dean not later than fifteen days before the date set for the examinations.

In addition to the foregoing examinations students are required: to dissect satisfactorily one lateral half of the cadaver; to report satisfactorily an analysis of a specimen of urine and a clinical examination of a specimen of blood; to examine and report upon six clinical cases in general medicine and two cases in surgery; to perform satisfactorily two major surgical operations upon the cadaver; to work not less than two weeks in the Dispensary Service of the University or other hospitals; to work not less than two weeks in the Clinical Laboratory of the University or of some other hospital approved by the Dean; to take charge of one or more obstetrical cases and to report thereon; to examine and report on one case in either ophthalmology, laryngology, otology, dermatology, or orthopedics; to report upon one case in gynecology.

Proficiency is marked upon a scale of 100. A grade of 70 is required to pass an examination.

Students do not receive their numerical grades, but are notified that they have attained grades A, B, C, D, E, or F, as the case may be. A signifies 96 to 100; B signifies 90 to 95; C signifies 80 to 89; D signifies 70 to 79; E signifies failure; F signifies failure to appear for examination.

REQUIREMENTS FOR DEGREES.

Every candidate for the degree of Doctor of Medicine must be at least twenty-one years of age and of reputable character. He must have complied with the admission examination and other requirements herein set forth. He must file with the Dean, at least 30 days before the dates fixed for conferring of degrees, a notice of his intention to appear for graduation, and he must be present at the time specified for examination, and also at Commencement or Convocation. The degree is not conferred in the absence of a candidate except by special consent of the President's Council. Graduates of other accredited colleges must spend one year in residence at this school.

To be eligible for graduation the candidate must pass all his examinations.

Candidates who in their work and examinations attain general averages of 80 or more will be presented to the Faculty for consideration with reference to being designated as "having graduated with distinction." If in the opinion of the Faculty such candidates have shown themselves to be possessed of more than ordinary merit, they will have inscribed upon their diplomas beneath their degree the words "with distinction," and the names of such graduates will be distinctively printed at the head of the list of graduates of the year.

Candidates who have completed their courses, but have not passed their final examinations, may take the fall or the winter re-examinations upon payment of a fee of $10, and, if successful, receive their diplomas at the Fall or Winter Convocation, as the case may be, upon the payment of the diploma fee.

A student who has failed of graduation after repeating his final year will not be permitted to maintain his connection with the school.

COURSES IN ARTS AND SCIENCES.

Students taking a full course for the degree of Doctor of Medicine may, if otherwise qualified, be admitted without additional fee, except laboratory fees, to courses in the Department of Arts and Sciences, provided such courses do not exceed in the aggregate six hours a week.

SCHOLARSHIPS.

Applications for scholarships should be filed with the Registrar of the University not later than September 15. Students holding scholarships pay the matriculation, library, laboratory, and graduation fees, and make the deposit to cover breakage. Holders of scholarships must also maintain a satisfactory scholastic average.

CORCORAN SCHOLARSHIPS.—In recognition of the liberality of the late W. W. Corcoran, the University has established in this department six free scholarships.

Two of these scholarships are open for competitive examination to the graduates of the several high schools and the manual training school of the District of Columbia. These two scholarships are awarded to the two students whose averages are highest.

Two of the scholarships are open for competitive examination to graduates of any reputable high school or college who shall give satisfactory written evidence of pecuniary inability and certificates of good moral character and industry. These two scholarships are awarded to the two graduates whose averages are highest.

The remaining two scholarships are open for competitive examination to students who, though not graduates of any high school or college, give satisfactory evidence that they are fitted by previous education for the study of medicine, and at the same time give satisfactory written evidence of pecuniary inability and certificates of good moral character and industry. These two scholarships are awarded to the two students whose averages are highest.

In establishing these averages professional aptitude and general qualifications are considered along with scholastic ability.

MEDICAL MISSIONARY SCHOLARSHIPS.—Two Medical Missionary Scholarships will be given to such applicants as are judged by the President of the University best qualified to enter upon the study of medicine for the purpose of becoming medical missionaries. These scholarships are awarded for one year only, but they may be renewed.

PRIZES.

A general examination prize of $50 is annually awarded to the candidate for graduation who attains the highest average grade in all subjects.

Professor H. C. YARROW gives a prize for the best examination in Dermatology.

Professor CHARLES W. RICHARDSON gives a prize for the best examination in Laryngology and Otology.

Professor ACKER gives a prize for the best examination in Pediatrics.

Professor BUTLER gives a prize for the best examination in Ophthalmology.

HOSPITAL APPOINTMENTS.

Three interns are annually appointed in the University Hospital. They are appointed from graduates who have served as externs. Seven externs are also appointed from graduates and from the fourth-year

class. In making these appointments scholastic standing and general efficiency and aptitude are considered. Appointments to similar positions are open to the graduates and undergraduates of this school in the following other hospitals of the city: Garfield Memorial Hospital, Emergency Hospital, Columbia Hospital for Women, Casualty Hospital, Providence Hospital, Washington Asylum Hospital, Children's Hospital, Episcopal Eye, Ear, Throat, and Nose Hospital.

CLINICAL FACILITIES.

The following hospitals are open to the students of this school for clinical study.

University Hospital.—This hospital is a part of the educational equipment of this University, and is intended to be used primarily in instructing the students in clinical medicine, surgery, and obstetrics. It has also in connection with it an out-patient or dispensary service in all departments.

Garfield Memorial Hospital.—This institution has 118 charity beds. Clinics are given regularly throughout the session by members of the Faculty connected with the visiting staff of the hospital. There is also an out-patient department, giving good opportunities for experience in the practice of physical diagnosis.

Children's Hospital.—Regular clinical instruction is given in the medical and surgical wards by members of the Faculty on the visiting staff of the hospital. This institution has 100 charity beds. There is also a large out-patient department.

Emergency Hospital and Central Dispensary.—This hospital has 36 charity beds, and has a very large out-patient service. The large emergency service gives exceptional facilities in clinical surgery. Several members of the Faculty are on its visiting and dispensary staffs and give clinical instruction to the students.

Columbia Hospital for Women.—This hospital has 68 charity beds for diseases peculiar to women and 50 charity maternity beds. Members of the Faculty are connected with its service and use its facilities for clinical instruction.

Providence Hospital.—This institution has a large charity service—100 beds for medical and surgical cases and 30 maternity beds.

The Government Hospital for the Insane.—This hospital is maintained by the United States Government. It has 2,500 beds. Clinical instruction in mental diseases is given by the superintendent of the hospital, who is a member of the Faculty of this school.

Episcopal Eye, Ear, Throat, and Nose Hospital.—Excellent opportunities for clinical instruction in ophthalmology, otology, laryngology, and rhinology are offered by this hospital. Members of the Faculty are on its staff.

Lutheran Eye and Ear Dispensary.—This dispensary affords good opportunities for clinical study of diseases of the eye, ear, throat, and nose. Clinical instruction is given by a member of the Faculty.

Casualty Hospital.—Opportunities in emergency and dispensary work are afforded by this institution.

Location of Hospitals.

University Hospital, H street between Thirteenth and Fourteenth streets, northwest, and adjacent to the Medical Building. Visiting staff: Members of the Faculty of the Department of Medicine.

Garfield Memorial Hospital, Florida avenue and Tenth street, northwest. Members of the Faculty on the visiting staff:

Professor Claytor, Clinical Medicine; Professor Cook, Clinical Medicine; Professors Van Rensselaer and Snyder, Clinical Surgery; Professor Staveley, Clinical Gynecology; Professor Carmichael, Clinical Dermatology; Professor Butler, Clinical Ophthalmology; Professor Hagner, Clinical Genito-Urinary Surgery.

Children's Hospital, W street between Twelfth and Thirteenth streets, northwest. Members of the Faculty on the visiting staff:

Professor Wellington, Clinical Surgery; Professor Acker, Clinical Medicine.

Emergency Hospital and Central Dispensary, Fifteenth street and Ohio avenue, northwest. Members of the Faculty on the visiting staff:

Professor Carr, Clinical Surgery; Professor Hagner, Clinical Genito-Urinary Diseases; Dr. Macatee, Clinical Medicine; Professor Carmichael, Clinical Dermatology; Dr. Miller, Clinical Gynecology; Professor Shands, Orthopedics.

Columbia Hospital for Women, Twenty-fifth street and Pennsylvania avenue, northwest. Members of the Faculty on the visiting staff.

Professor Bovee, Clinical Gynecology; Professor Cabell and Professor Morse, Clinical Obstetrics.

Providence Hospital, Second and D streets, southeast. Members of the Faculty on the visiting staff:

Professor Bovee, Clinical Gynecology; Professor Richardson, Clinical Laryngology and Otology; Professor Shute, Clinical Ophthalmology.

Episcopal Eye, Ear, Throat, and Nose Hospital, Fifteenth street between L and M streets, northwest. Members of the Faculty on the visiting staff:

Professor RICHARDSON, Clinical Otology and Laryngology; Dr. McKIMMIE and Dr. DYE, Clinical Otology and Laryngology.

Lutheran Dispensary, Fourteenth and N streets, northwest. Member of the Faculty on the visiting staff:

Professor BUTLER, Clinical Ophthalmology.

Government Hospital for Insane, Anacostia, D. C. Members of the Faculty on the visiting staff:

Professor WHITE, Mental Diseases; Professor CLARK, Nervous Diseases.

Casualty Hospital, Massachusetts avenue, northeast. Members of the Faculty on the visiting staff:

Professor WELLINGTON, Clinical Surgery; Dr. FRANKLAND, Clinical Gynecology; Dr. NOBLE P. BARNES, Clinical Medicine.

LABORATORIES.

The different laboratories of the Department are all modern and equipped with the necessary apparatus for thorough work.

PATHOLOGICAL MUSEUM.

A great many valuable and interesting specimens are contained in the Pathological Museum of this school. Their number is increased by additions from time to time. These specimens are particularly valuable to the students as illustrating the changes produced by disease.

OTHER MUSEUMS.

The Army Medical Museum affords an unrivaled opportunity for studying the conditions met with in military surgery. It contains on exhibition a collection of anatomical and pathological specimens unequaled by any other museum. Other Government museums are the Museum of Hygiene, in connection with the Medical Department of the Navy. The National Museum contains the most complete and best arranged collection of materia medica in the world. The drugs are shown in all their processes of manufacture. The Botanic Gardens, the Smithsonian Instutition, the Fish Commission, the Department of Agriculture all afford opportunities for study both in medicine and its collateral sciences.

THE UNIVERSITY MEDICAL LIBRARY.

The Medical Library is open for study and consultation from 9 a. m. to 10.30 p. m. It contains at present more than 1,400 volumes, and provision is made in the annual library fee charged every student to add to it as published the important new works on medicine. As the library stands at present, it is an excellent working collection for the medical student.

OTHER LIBRARIES.

Washington contains the Library of the Surgeon General's office of the United States Army, the most complete medical library in the world. This library, as all other libraries of the Government, is open to the public between the hours of 9 a. m. and 4.30 p. m. There is also the Library of Congress and the many excellent libraries of the various other Government offices.

FEES AND CONTINGENT EXPENSES.

1. Matriculation fee (payable only on first entry into the University) $5
2. Library fee per annum 2
3. Tuition fee per annum, including all charges for materials..... 150
4. Fee for graduation 10

A deposit of $5 per annum is required of every student to cover loss, breakage, or damage to the property of the school. The amount of such deposit paid in excess of the breakage will be returned.

5. Tuition fees per annum for special courses are noted on page 121, paragraph 6.
6. Tuition fee per annum for any year repeated once, or for a fifth year 75

In addition to the tuition fees for special or repeated laboratory courses, a charge will be made for materials used.

7. Fee for a certificate under the seal of the University..... 2
8. Auditors are admitted to lecture courses for the regular tuition fees, but are not permitted to take active part in the work of the classes, and will not be allowed credit, in a subsequent course of studies leading to a degree, for attendance as auditors. No matriculation or library fee is charged.

No change will be made in the fees fixed at registration except in case of withdrawal, and then only upon notice in due form, and from the end of the current quarter session, when such withdrawal shall be approved. Applications for the granting of a withdrawal should be

made on the prescribed form to be obtained from the Registrar, and will be received only at the end of a quarter session.

Students are urged to purchase their own microscopes, but those who do not care to do so may rent them from the University at the following rates:

Microscope for Histological Laboratory use..... $3
Microscope for Bacteriological, Pathological, and Clinical Microscopy Laboratory use 5

PAYMENT OF FEES.

All fees are to be paid to the Treasurer. Tuition fees are payable quarterly, in advance. Matriculation, library, and laboratory fees are payable in full, in advance.

BOARD AND ROOMS.

A register of approved boarding houses is kept by the Treasurer. Accommodations cost from $25 to $40 a month.

THE REGISTRAR,
The George Washington University,
Washington, D. C.

II. DEPARTMENT OF DENTISTRY.

FACULTY.

CHARLES WILLIS NEEDHAM, LL.D.....PRESIDENT OF THE UNIVERSITY
J. HALL LEWIS, D.D.S.....Dean and Professor of Prosthetic Dentistry
HENRY C. THOMPSON, D.D.S.....Professor of Operative Dentistry
D. KERFOOT SHUTE, A.B., M.D.....Professor of Anatomy
CHARLES E. MUNROE, Ph.D.....Professor of Chemistry
THOMAS A. CLAYTOR, M.D.....Professor of Materia Medica and Therapeutics
JONATHAN R. HAGAN, D.D.S.....Professor of Oral Surgery
JOHN B. NICHOLS, M.D.....Professor of Histology
JAMES CARROLL, M.D.....Professor of Bacteriology and Pathology
J. ROLAND WALTON, D.D.S.....Professor of Prosthetic Technics
J. H. P. BENSON, D.D.S.....Professor of Operative Technics
E. G. SEIBERT, M.D.....Assistant Professor of Chemistry
W. F. R. PHILLIPS, M.D.....Assistant Professor of Practical Anatomy
WILLIAM H. TRAIL, D.D.S.....Assistant Professor of Materia Medica
D. WEBSTER PRENTISS, M.D.....Assistant Professor of Histology
L. H. TAYLOR, M.D.....Assistant Professor of Histology
NOBLE P. BARNES, M.D.....Lecturer on Materia Medica
S. H. GREENE, JR., M.D.....Instructor in Anatomy
J. L. RIGGLES, M.D.....Instructor in Anatomy
OTIS D. SWETT, B.S.....Instructor in Chemistry
FREDERICK I. BARTLETT, D.D.S.....Instructor in Crown and Bridge Work and in Prosthetic Technics
HOWARD P. COBEY, D.D.S.....Instructor in Porcelain Work
ARTHUR B. COOPER, D.D.S.....Instructor in Porcelain Work
HARRY H. DONNALLY, M.D.....Assistant Instructor in Bacteriology
CHARLES BASSETT, D.D.S.....Assistant Professor in Charge of the Dental Infirmary
HURON W. LAWSON, M.D.....Assistant Demonstrator of Anatomy
GEORGE B. HEINECKE, M.D.....Assistant Demonstrator of Anatomy
EDWARD ELLIOTT RICHARDSON, M.S., M.D.....Assistant Demonstrator of Anatomy
W. A. FRANKLAND, M.D.....Assistant Demonstrator of Anatomy
ELMER SLAYTON NEWTON, B.A., M.D.....Assistant in Chemistry
HENRY M. JEWETT, M.D.....Assistant Instructor in Histology
CHARLES L. BOVEE, D.D.S.....Demonstrator in the Dental Infirmary
CADMUS LINDEN ODOR, D.D.S.....Demonstrator of Operative Technics

JOSEPH WOOD POLLOCK, D.D.S..Assistant Demonstrator in the Infirmary
ARTHUR MILLARD TRIVETT, D.D.S.....Assistant Demonstrator in the Infirmary
THOMAS R. WILKERSON, D.D.S.....Assistant Demonstrator in the Infirmary
M. E. HARRISON, D.D.S.....Assistant Demonstrator in the Infirmary

GENERAL STATEMENT.

The first course of lectures in the Dental School began November, 1887, under the title of "The Columbian University Dental Department." The course then extended over two years of five months each. Two years later the course was extended to seven months; but, this additional time being found inadequate to keep pace with the ever-increasing demand for higher dental education, the course was gradually increased, until now it extends over three years of eight months each.

The academic year begins on the last Wednesday in September and ends on the first Wednesday in June. The next session will begin September 25, 1907. Students should register promptly at the office of the Registrar at the beginning of the session, and no student can be received and credited with a full term after ten days from the first lecture. Final examinations are held at the conclusion of the instruction in each subject. The degrees are conferred at Commencement, the first Wednesday in June, the Fall Convocation, and at the Winter Convocation, February 22. For further information communicate with the Dean of the Dental Department or the Registrar of the University.

ADMISSION.

Candidates for matriculation must show that they are fitted by previous education to study dentistry. For this purpose they must present a satisfactory certificate of their attainments from an approved school or college, or they must pass an examination.

Candidates are admitted without examination:

(1) Upon presenting a diploma or certificate of a reputable college conferring on them the degree of A.B. or B.S., or an equivalent degree in the arts and sciences.

(2) Upon presenting a diploma or certificate of graduation from a high school, academy, or preparatory school approved by the University as maintaining an adequate standard.

(3) Upon presenting a certificate of admission to the Freshman class of an approved college.

(4) Upon presenting a certificate of admission to another dental school approved by the University as maintaining an adequate standard.

Candidates unable to comply with the foregoing requirements are admitted upon passing an examination based upon the general requirement for admission to colleges, which is a four-year high school course, or its equivalent, modified to meet the regulations of State Dental Boards. This examination comprises subjects selected from the annexed list equal to 15 units. For admission to the regular course in Dentistry eight (8) of the 15 units are required in the following subjects.

	Units.
English	3
Mathematics	3
Physics	1
Latin	1
Total	8

The other 7 units may be selected from the other subjects. A unit is considered the equivalent of one year's high school work in a subject.

LIST OF SUBJECTS.

English:	Units.
(*a*) Grammar	1
(*b*) Rhetoric and Composition	1
(*c*) Literature—a knowledge of the form, subject-matter, and literary history of prescribed works is required	1

The following are the works prescribed for 1906-07: Burke's Speech on Conciliation, Macaulay's Essay on Addison, Macaulay's Essay on Milton, Milton's L'Allegro, Il Penseroso, Comus, and Lycidas; Shakespeare's Macbeth. Equivalent reading may be offered.

Latin:	Units.
(*a*) Elementary Grammar	1
(*b*) Cæsar's Commentaries, Books I-IV	1

Greek:	
(*a*) Elementary Grammar	1
(*b*) Xenophon or Homer	1

Modern Languages:	Units.
(*a*) French, translation of easy prose	1
(*b*) German, translation of easy prose	1
History:	
United States	1
English	1
Greek and Roman	1
General	1
Mathematics:	
(*a*) Algebra through quadratics	1½
(*b*) Plane Geometry	1
(*c*) Plane Trigonometry	½
Sciences:	
Physics	1
Chemistry	1
Astronomy	½
Biology	1
Geology	½
Botany	1
Physical Geography	½
Physiology	½

The scope of the different subjects is indicated in standard high school text-books.

Candidates may offer other subjects than those stated in the foregoing list of subjects, and if they are acceptable examinations will be arranged. A candidate may offer certificates of an approved school for work done in any of the foregoing subjects, and will be credited with the units represented by such work. A candidate failing to pass in two of the subjects of his examination may be admitted to the first year upon the condition that he make up the deficiency before entering the second-year class. The examinations are conducted by examiners appointed by the Superintendent of Schools of the District of Columbia.

The examinations for admission will be held in June and September, at the Dental Department. An applicant deficient in either Latin or Physics, or both, may be admitted to the first-year class conditioned in those subjects, but such conditions must be made up during the first year.

COURSE OF INSTRUCTION.

The course of instruction extends through three years of eight months each. The subjects taught during the course are divided as follows:

First year.	Second year.	Third year.
Anatomy.	Operative Dentistry.	Operative Dentistry.
Physiology.	Prosthetic Dentistry.	Prosthetic Dentistry.
Chemistry.	Pathology.	Oral Surgery.
Histology.	Materia Medica.	Orthodontia Technics.
Operative Technics.	Therapeutics.	Operative Technics.
Prosthetic Technics.	Operative Technics.	Prosthetic Technics.
	Prosthetic Technics.	Infirmary Practice.
	Infirmary Practice.	Dental Therapeutics.
	Bacteriology.	

These studies are further described in the following pages.

PROSTHETIC DENTISTRY AND METALLURGY.

J. Hall Lewis, D.D.S.....*Professor*

In this subject the principles involved in the construction of artificial substitutes are exhaustively considered and the lectures supplemented by practical demonstrations of the subjects mentioned. In addition to the more commonly used vegetable bases for artificial teeth, the use of gold, silver, and platinum is thoroughly taught, and bridge work and the construction of appliances for correcting oral irregularities, etc., are carefully considered. The modes of preparation, properties, etc., of the metals and alloys of particular interest to the dentist receive special attention.

The instruction is thoroughly practical, with the purpose of preparing the student for the actual every-day practice of prosthetic dentistry.

OPERATIVE DENTISTRY, DENTAL ANATOMY AND PATHOLOGY.

HENRY C. THOMPSON, D.D.S.....*Professor*

This course embraces lectures on the special anatomy and physiology of the teeth. The origin, growth, and eruption of the teeth receive minute attention, and are illustrated as their importance demands.

The methods of treating, filling. and extracting teeth receive attention in the lecture-room, and are demonstrated clinically by proficient operators. Extended consideration is given to dental pathology and therapeutics.

CHEMISTRY.

CHARLES E. MUNROE, Ph.D.....*Professor*
E. G. SEIBERT, M.D.....*Assistant Professor*
OTIS D. SWETT, B.S.....*Instructor*
ELMER S. NEWTON, B.A., M.D.....*Assistant*
ARTHUR N. TASKER, B.A.....*Assistant*

The instruction in this subject embraces:

A short discussion of the principles of Physics in their relation to Chemistry, the principles of chemical philosophy. and the laws of chemical combination.

A study of the elements, metallic and non-metallic; the preparation, properties, and reaction of their different compounds and their application in dentistry; Organic Chemistry, with special attention to those organic compounds that are of practical use; laboratory instruction in the determination of acids and bases, analyses of alloys, etc.

PHYSIOLOGY.

W. P. CARR, M.D.....*Professor*
L. H. TAYLOR, M.D.....*Assistant Professor*

The subject is fully covered the first year by a course of lectures, and these lectures are so illustrated by modern diagrams, models, and experiments as to make them clear in detail. Emphasis is given to principles that have a known practical value.

MATERIA MEDICA AND THERAPEUTICS.

THOMAS A. CLAYTOR. M.D.....*Professor*
WM. H. TRAIL, D.D.S.....*Assistant Professor*
NOBLE P. BARNES, M.D.....*Lecturer on Materia Medica*

Instruction in this subject extends through the first two years, and embraces:

The study of crude drugs and their preparations and the art of pre-

scribing; the physiological action of drugs in the human system; the practical application of drugs and other therapeutical agencies to the prevention and cure of diseases and the relief of suffering, together with their antidotal relation to poisons.

The subject is taught by means of lectures, recitations, and blackboard illustrations, and is made practical to as great a degree as is compatible with a sufficiently thorough understanding of it sprinciples.

In connection with this chair is a pharmaceutical laboratory, well equipped with modern appliances, in which are taught the making of typical preparations of the Pharmacopœia, prescription writing, and the compounding of prescriptions.

ANATOMY.

D. Kerfoot Shute, A.B., M.D.....*Professor*
W. F. R. Phillips, M.D.....*Assistant Professor*
Geo. B. Heinecke, M.D.....*Assistant Demonstrator*
Virgil B. Jackson, M.D.....*Assistant Demonstrator*
E. E. Richardson, M.D., M.S.....*Assistant Demonstrator*
W. A. Frankland, M.D.....*Assistant Demonstrator*
S. H. Greene, Jr., M.D.....*Instructor*
J. L. Riggles, M.D.....*Instructor*
R. M. Little, M.D.....*Assistant Demonstrator*
Geo. M. Ruffin, M.D.....*Instructor*
Jos. D. Rodgers, M.D.....*Assistant Demonstrator*

The instruction in Anatomy is given in a graded course of lectures, recitations from prescribed text-books, and especially by practical work in the dissection of the cadaver. The lectures are illustrated by the use of dry and wet dissections of the cadaver, by models, diagrams, charts, and sciopticon views.

Practical work in osteology and in dissection of the head are of fundamental importance. For the study of these subjects the class is divided into sections in order to make the instruction as practical as possible. The bones of the skeleton are placed in each student's hands, and he is instructed and quizzed upon all their important features.

ORAL SURGERY.

J. R. Hagan, D.D.S.....*Professor*

This subject includes lectures on general surgery, surgical bacteriology, inflammations, abscess, gangrene and necrosis, the reduction of luxations and fractures and all the latest appliances for their proper retention; diagnosis and treatment of the maxillary sinus, plastic operations for correction of cleft palate and hare lip, treatment of wounds,

shock and collapse; also the origin, classification, growth, and removal of tumors of the face, mouth, and jaw.

HISTOLOGY.

JOHN B. NICHOLS, M.D.....*Professor*
D. WEBSTER PRENTISS, M.D.....*Assistant Professor*
HENRY M. JEWETT, M.D.....*Assistant Instructor*
C. L. DAVIS, M.D.....*Assistant Instructor*

The course in Histology consists in a systematic presentation of the subject of the minute anatomy of the various parts of the body, especial attention being devoted to the histology of the teeth and neighboring structures. The subject is presented partly by systematic lectures, and more especially by the practical study by the individual students of actual specimens under the microscope. The methods of preparation of microscopical specimens are presented and practiced in the laboratory. The projection microscope affording valuable aid in illustrating and presenting the subject, is constantly used.

BACTERIOLOGY.

JAMES CARROLL, M.D.....*Professor*
HARRY H. DONNALLY, M.D.....*Assistant Instructor*

The course begins with a consideration of the principles involved in the process of sterilization by dry and moist heat, the relative value and mode of application of each, and an explanation of the construction of the apparatus employed for the purpose. The use and construction of the thermostat is taken up at the same time and the student taught how he can dispense with these costly appliances in emergencies.

The composition and modes of preparation of the various nutritive media are next considered, working formulas given, and the student required to prepare them at least once in the laboratory. This is followed by a discussion of bacteria as a class, their position in the biological world, their classification, distribution, and the general and special characters that belong to them.

After this preparatory training the various methods in use for the isolation and study of bacteria are taught by practical demonstration and practiced by the students, after which the most important pyrogenic organisms are studied in detail, giving special attention to those found in the nasal and oral cavities.

The aim of the course is chiefly to afford the students an opportunity to become practically familiar with bacteriological working methods, and to enable them to isolate and identify the bacteria present in suppurative processes, as well as to comprehend intelligently the references to micro-organisms in the current professional literature of the day.

OPERATIVE TECHNICS.

J. H. P. Benson, D.D.S.....*Professor*
Cadmus L. Odor, D.D.S.....*Assistant*

This subject is taught by lectures, illustrated by enlarged models and drawings, together with demonstrations of instruments and materials. The students perform exercises in manipulative procedure under the direction of the instructors.

The subjects embraced in the course consist, first, of the study of dental nomenclature, that the student may acquire an understanding of the technical terms used in the course of his dental studies. This is followed by decriptive dental anatomy and the forms and surface markings of each tooth studied, the natural teeth, as well as enlarged models and drawings, being used for the purpose. Each student is required to make various sections of the teeth for the thorough study of the pulp chambers and root canals and their relations to the external surfaces of the teeth.

That tooth-forms may be more perfectly impressed upon the mind of the students, each one is required to carve a tooth of the several classes, as incisor, cuspid, bicuspid, and molar, in bone or artificial ivory, representing the actual form and size of the natural organ. Cavities are classified and illustrated by drawings and models, followed by their preparation and filling in technic forms by the student. Treating and filling root canals is given full attention, the students performing operations of this kind upon natural teeth mounted for the purpose.

All work, in its relation to operative dentistry, is given the necessary consideration to fit the student for meeting, as far as possible the actual requirements of the infirmary. The operations in the technic department require a large number of natural teeth and a sufficient supply is difficult to obtain. It will, therefore, be to the interest of students if they will bring with them all the extracted teeth they can procure.

ORTHODONTIA.

J. Roland Walton, D.D.S.....*Professor*
Charles Bassett, D.D.S.....*Instructor*

Orthodontia is taught by lectures and practical work in the Infirmary.

Junior year Orthodontia is a technical course with such lectures and demonstrations as will enable the student to perform the Infirmary work. The Senior year is a review of the Junior studies with advanced lectures upon the irregularities of the teeth, local and constitutional. Each student is required to make a number of appliances upon models and practically correct cases of irregularity.

CROWN AND BRIDGE WORK.

CHARLES L. BOVEE, D.D.S.....*Instructor Senior Class*
ALLEN S. WOLFE, D.D.S.....*Instructor Junior Class*
FREDERICK I. BARTLETT, D.D.S.....*Instructor Freshman Class*

Instruction in this course is systematically given by lectures and clinics. The course in technique extends through the Freshman, Junior, and Senior years.

PROSTHETIC TECHNICS.

CHARLES L. BOVEE, D.D.S.....*Instructor Senior Year*
ALLEN S. WOLFE, D.D.S.....*Instructor Junior Year*
FREDERICK I. BARTLETT, D.D.S.....*Instructor Freshman Year*

The technic laboratories are thoroughly equipped for their particular work. The course in prosthetic technics extends through the Freshman, Junior, and Senior years.

The first year is a technical course. The students are taught the proper equipment of a dental laboratory; the preparation of the mouth for dentures; methods of taking impressions of the mouth and manipulation of the various impression materials; the preparation and mounting of models; selection and artistic arrangement of teeth; the construction of plastic dentures with general details.

In the Junior class the course is a review of the Freshman year with extended technical work, embracing a practical course in the swaging of the various metals, as taking impressions, making models and dies, swaging, rimming, attaching teeth by rubber, and in general construction of metal dentures, crown and bridge work.

The Senior year is a practical course, embracing the swaging of plates, teeth attached by soldering, clasps, porcelain work, advanced bridgework, removable bridges, and the detailed construction of all work in prosthetic dentistry.

PORCELAIN WORK.

ARTHUR B. COOPER, D.D.S.....*Instructor*

Students are taught the principles and practice of inlay work, porcelain crowns, high and low fusing bodies, the use of the electric and gas furnaces.

THE DENTAL INFIRMARY.

CHARLES BASSETT, D.D.S.....*Demonstrator in Charge*
CHARLES L. BOVEE, D.D.S.....*Demonstrator*
JOSEPH WOOD POLLOCK, D.D.S.....*Demonstrator*
ARTHUR MILLARD TRIVETT, D.D.S.....*Demonstrator*
THOMAS R. WILKERSON, D.D.S.....*Demonstrator*

The Infirmary is open every week day for nine continuous months (being closed during the months of July, August, and September), during which time an abundance of clinical material is readily available. In fact, as many patients present themselves as can possibly be attended to by the students. It is under the immediate supervision of the Demonstrator in charge, who is present from 1 until 6 o'clock each week day.

TEXT-BOOKS AND WORKS OF REFERENCE.

(The works first named and in *italics* are preferred.)

Anatomy.—*Cunningham's Text-Book of Anatomy; Cunningham's Manual of Practical Anatomy;* Dental Anatomy, Black's.

Physiology.—Raymond's Human Physiology.

Chemistry.—*Simon's Chemistry.*

Materia Medica.—*H. C. Wood's Therapeutics;* Hare's Practical Therapeutics; A. A. Stevens' Modern Materia Medica and Therapeutics; Culbreth's Materia Medica and Pharmacy; National Dispensatory.

Prosthetic Dentistry.—*The American Text-Book of Prosthetic Dentistry;* Essig's Dental Metallurgy.

Operative Dentistry.—*Harris' Principles of Practice;* Tome's Dental Anatomy and Surgery; Taft's Operative Dentistry; American System of Dentistry—Litch.

Oral Surgery.—Marshall's Oral Surgery; Grant's Oral Surgery.

Histology.—Nichols, Böhm and Davidoff.

Orthodontia.—Talbot, Irregularities of the Teeth; Angle. Treatment of Malocclusion of the Teeth and Fractures of the Maxillæ; Jackson, Orthodontia.

GRADUATION.

Candidates for graduation must have attended three full courses of lectures, each of eight months duration, and three courses of clinical instruction in this Department, during the regular winter term and in separate years. Students are examined at the end of the regular course upon all subjects taught them during that course. Should the student fail in his examination in course, he may be re-examined in the fall. All fees must be paid and Infirmary requirements complied with before the student may present himself for examination.

Students must enter before, or within ten days after, the opening lecture of the regular course. They may register at any time during the nine months Infirmary course, and thus begin Infirmary practice at once upon payment of twenty-five dollars, which amount will be deducted from their tuition fees for the succeeding regular term.

The candidate for graduation must be examined upon all subjects taught in this Department, and before the examination he must perform operations upon the natural organs in the Infirmary, and present the

Museum a well-constructed specimen of dental mechanism made by himself in the dental laboratory of the University.

In addition to the above requirements, the moral character and habits of the candidate, his industry, and diligent attendance will be taken into consideration. Notable negligence, immorality, or habitual absence from the lectures will preclude the candidate from attaining his degree, even though he may have acquired sufficient technical knowledge to pass a creditable examination. This reservation on the part of the Faculty of the right to make good moral character a prerequisite for graduation must not be overlooked.

The student also, during and between the sessions, must comply with the State laws regulating the practice of Dentistry, and act in accordance with the recognized code of ethics of the dental profession.

The degrees are conferred by The George Washington University, incorporated by Act of Congress of the United States.

PRIZES.

FACULTY PRIZE.—A prize will be given by the Faculty to the graduate passing the best examination in all branches and having the best Infirmary record.

COURSES IN ARTS AND SCIENCES.

Students taking a full course for a degree may be admitted without additional fee, except laboratory fees, to courses for which they are qualified, in the Department of Arts and Sciences, the aggregate of such courses not to exceed six hours per week.

LOCATION.

The Dental Building is No. 1325 H street, N. W. It is within half a square of all lines of street cars going to every part of the city.

The Dean may be seen personally at 1121 Vermont avenue on any week day from 3 to 4 p. m., and also at the Dental Building, 1325 H street, N. W., on Tuesday, Thursday, and Saturday of each week at 4.30 p. m.

FEES AND CONTINGENT EXPENSES.

1. Matriculation fee (payable only on first entry into the University) $5
2. Library fee per annum..... 2
3. Tuition fee per annum, including all charges for materials..... 150

A deposit of $5 per annum is required of every student to cover loss, breakage or damage to the property of the school. The amount of such deposit paid in excess of the breakage will be returned.

4. Fee for graduation 10
5. Tuition fees per annum for special courses are noted on page 121, paragraph 6.

6. Tuition fee per annum for any year repeated once..... $75
   In addition to the tuition fees for special or repeated laboratory courses, a charge will be made for materials used.
7. Fee for a certificate under the seal of the University..... 2
8. Auditors are admitted to lecture courses for the regular tuition fees, but are not permitted to take active part in the work of the classes and will not be allowed credit, in a subsequent course of studies leading to a degree, for attendance as auditors. No matriculation or library fee is charged.

No change will be made in the fees fixed at registration except in case of withdrawal, and then only upon notice in due form and from the end of the current quarter session when such withdrawals shall be approved. Applications for the granting of a withdrawal should be made on the prescribed form, to be obtained from the Registrar, and will only be received at the end of a quarter session.

Students are urged to purchase their own microscopes, but those who do not care to do so may rent them from the University at the following rentals:

Microscope for Histological Laboratory use..... 3
Microscope for bacteriological, pathological, and clinical microscopy laboratory use 5

PAYMENT OF FEES.

All fees are to be paid to the Assistant Treasurer. Tuition fees are payable quarterly, in advance. Matriculation, library, and laboratory fees are payable in full, in advance.

BOARD AND ROOMS.

A register of approved boarding houses is kept by the Treasurer. Accommodations cost from $25 to $40 a month.

For catalogues, application blanks and further information, address

THE REGISTRAR,
The George Washington University,
Washington, D. C.

Department of Law.

FACULTY.

Charles Willis Needham, LL.D.....President of the University
William Reynolds Vance, Ph.D., LL.B.....Dean of the Faculty and Professor of Law
John M. Harlan, LL.D.....Professor of Law
David J. Brewer, LL.D.....Professor of Law
Melville Church, LL.M.....Professor of the Law of Patents
Walter C. Clephane, LL.M.....Professor of Law
Edwin C. Brandenburg, LL.M.....Professor of Law
Arthur Peter, LL.M.....Professor of Law
Henry P. Blair, LL.M.....Professor of Law
Stanton J. Peelle, LL.D.....Professor of Law
John Paul Earnest, A.M., LL.M.....Professor of Law
Ernest G. Lorenzen, Ph.B., LL.B., J.U.D.....Professor of Law
James Brown Scott, M.A., J.U.D.....Professor of Law
William Cullen Dennis, A.M., LL.B.....Professor of Law
Edward Sampson Thurston, A.M., LL.B..Assistant Professor of Law
Joshua Reuben Clark, Jr., B.S., LL.B....Assistant Professor of Law
John Wilmer Latimer, LL.B.....Clerk of the Moot Court
Otis D. Swett, B.S., LL.M.....Secretary

COURT OF APPEALS.

William F. Mattingly, LL.D.....Chief Justice
John B. Larner, LL.B.....Associate Justice
A. A. Hoehling, Jr., LL.B.....Associate Justice

GENERAL STATEMENT.

This Department, established in 1865, is the oldest school of law in the city of Washington. Its course of instruction for the degree of Bachelor of Laws, originally requiring but two years, was gradually expanded, until, in 1898, in accordance with the recommendation of the Association of American Law Schools, of which this school is one of the charter members, it was increased to three years. The Faculty has also shown a gradual increase in numbers commensurate with the expansion of the course and the growing number of students in attendance. In June, 1903, the Board of Trustees adopted the policy of putting the fundamental subjects of substantive law in charge of permanent professors, devoting their whole time and energy to the work of the Department.

In 1877 a year of graduate work, leading to the degree of Master of Laws, was added to the course of instruction offered, and in 1905 a

special graduate course of three years, leading to the degree of Doctor of Jurisprudence, was established. A special course in Patent Law was added in 1895.

In June, 1898, an ordinance was adopted by the Board of Trustees formally establishing as a separate department of the University the Department of Jurisprudence and Diplomacy. This Department was opened on November 15, 1898.

In 1904, by the authority of the Board of Trustees, a new adjustment of graduate work in the University was made, resulting in the establishment of the Departments of Law and of Politics and Diplomacy (now called the College of the Political Sciences), the former embracing the undergraduate course in municipal law and graduate courses in the broader fields of general law, and the latter graduate and undergraduate courses in the political sciences, special attention being given to diplomacy.

LOCATION.

All classes in the Department of Law are held in Law Lecture Hall, situated on H street, adjoining the main University building, at the corner of Fifteenth street. This hall, dedicated on January 3, 1899, was especially designed for the work of this Department. It is commodious and well equipped with lecture-rooms, Moot Court rooms and offices, and contains a large library, with a conference-room adjoining.

ACADEMIC YEAR.

The academic year extends through more than eight months, beginning on the last Wednesday in September and ending on the first Wednesday in June, and is divided into two half-years, the second half-year beginning on the first day of February. Since most of the courses given during the first half-year are completed before the beginning of the second half-year, it is possible for a student to enter on the 1st of February of any year and be graduated three years from that date, receiving his degree at the Winter Convocation, held on February 22d of each year.

ADMISSION.

1. For the Degree of Bachelor of Laws.

Applicants for admission as candidates for the degree of Bachelor of Laws must be at least eighteen years of age and must have had educational training equivalent to a course in an approved high school The educational requirement may be satisfied by presentation of certificates or by examination in the usual high school branches. All applications for admission should be addressed to the Registrar of the University, who will, upon request, furnish proper blanks and detailed information as to entrance examinations.

Admission Requirements. Beginning with the session of 1909-1910, no student will be admitted to regular standing unless he shall have successfully completed two years of undergraduate work in an approved institution of collegiate rank. Applicants who have completed a high school course may, however, at the discretion of the Faculty, be admitted as special students. Such special students may qualify for graduation by showing an average grade during the entire course exceeding the passing grade by fifteen points.

2. For the Degree of Master of Laws.

Candidates for the degree of Master of Laws must be at least twenty-one years of age and hold the degree of Bachelor of Laws from an institution substantially complying with the requirements of the Association of American Law Schools, of which this school is a member.

3. For the Degree of Master of Patent Law.

Only those students who are graduates of an approved law school or members of the bar in good standing will be admitted as candidates for the degree of Master of Patent Law.

4. For the Degree of Doctor of Jurisprudence.

No student will be admitted as a candidate for a degree of Doctor of Jurisprudence unless he shall hold a baccalaureate degree conferred by some institution of approved standing after the completion of a liberal course of undergraduate academic study, and possess a reading knowledge of Latin, French, and German. At the discretion of the Faculty, however, other languages may be substituted when the character of the work undertaken is such as to warrant it. The right is reserved to the President's Council to decide in all cases whether the applicant has given sufficient evidence that his antecedent training fulfils these requirements. In addition, the candidate must hold the degree of Bachelor of Laws from this University or from some other institution requiring equivalent work as a prerequisite to that degree.

5. Special Students.

Persons who for any reason do not qualify as candidates for a degree may, on the recommendation of the Faculty and with the assent of the professors whose courses they elect to take, be admitted as special students. Special students may subsequently be admitted to regular standing in any of the classes upon satisfying the requirements of admission thereto.

ADVANCED STANDING.

Students may be admitted to advanced standing in the second or third year classes upon satisfying the requirements for the work of the preceding year or years. These requirements may be met by presenting certificates from other law schools of accredited standing showing that the

student has successfully completed equivalent courses, or by passing the regular examinations set for that purpose at the beginning of the term, after showing that he has pursued a course of study in the subjects upon which he is examined covering at least as many hours as are required for such subjects in this University.

Attorneys in good and regular standing who have been admitted to practice in any State requiring a written examination for admission to the bar may be admitted to advanced standing in the second or third year class, at the discretion of the Dean.

All examinations that may be required of applicants for advanced standing are held during the first week of each session.

HOURS FOR LECTURES.

During the session of 1907-08 instruction will be given to the first and second year classes during the forenoon as well as the afternoon hours, while to the third year class the lectures will as yet be given in the afternoon only. Of the instruction offered to each of the first and second year classes, aggregating more than fifteen hours per week, nine hours will be given in the afternoon between 4.50 and 6.30. A minimum of twelve hours each year, or thirty-six hours for the entire course of three years, is required for the degree of Bachelor of Laws. Therefore students who are so situated as to be able to attend only the afternoon lectures will find it possible to complete the amount of work required for the degree within four years, the subjects taught in the forenoon and afternoon, respectively, being so alternated that the afternoon student can, during his course, have the opportunity of securing instruction in all of the subjects open to undergraduates.

METHOD OF INSTRUCTION.

Instruction in the class-room is based upon the study and discussion of cases. In some of the courses students are required to read parallel assignments in text-books.

In conducting the discussion of cases in the class-room every effort is made to lead the student to a clear understanding of the fundamental legal principles that may be involved, and to afford him scientific training in accurate methods of study and of reasoning along legal lines. Students are also required to submit written briefs upon doubtful points of law, to draw up contracts, conveyances, and other papers when the nature of the subject in hand is such as to make exercises of this kind useful in giving accurate instruction.

All subjects involving the adjective law are in charge of professors who are engaged in active practice. The general principles of these subjects, taught in the same manner as indicated above, are developed by practice before the Moot Courts.

UNDERGRADUATE PROFESSIONAL COURSES.

Undergraduate students in Columbian College upon the completion of forty-five units of credit may take the first year's work of the course for Bachelor of Laws, crediting them fifteen units in the College, on the completion of which they may receive the College degree.

COURSES OF INSTRUCTION.

A. Leading to the Degree of Bachelor of Laws.

The course of instruction leading to the degree of Bachelor of Laws extends through a period of three years. A minimum of thirty-six hours' work will be required of all students hereafter entering the Department, students already registered being permitted to qualify for their degrees upon the completion of the courses as heretofore required. These include twelve hours of work each week for the first and second year classes, and ten hours for the third year class. By means of the courses as arranged, it is intended to give to the student such sound training in the fundamental principles of English and American law as will fit him for the practice of the legal profession in any of the States or Territories of the United States.

FIRST YEAR SUBJECTS.

First Half-Year.

Contracts. Professor Scott. Three hours a week. Williston's Cases on Contracts.

Property. Professor Vance. One hour a week. Gray's Cases on Property, Volume I.

Constitutional Law. Professor Harlan. Two hours a week. Cooley's Constitutional Law and McClain's Cases on Constitutional Law.

Torts. Professor Thurston. Three hours a week. Ames & Smith's Cases on Torts.

Domestic Relations. Professor Blair. Two hours a week. Long on Domestic Relations.

Criminal Law. Professor Earnest. Three hours a week. Clark on Criminal Law and Beale's Cases on Criminal Law.

Bailments. Professor Peelle. One hour a week. Hale on Bailments.

Second Half-Year.

Contracts. Professor Scott. Three hours a week. Williston's Cases on Contracts.

Property. Professor Vance. Two hours a week. Gray's Cases on Property, Volumes I and II.

Constitutional Law. Professor HARLAN. Two hours a week. Cooley's Constitutional Law and McClain's Cases on Constitutional Law.

Torts. Professor THURSTON. Two hours a week. Ames & Smith's Cases on Torts.

Criminal Procedure. Professor EARNEST. One hour a week. Clark on Criminal Procedure.

Sales. Professor BLAIR. Three hours a week. Burdick's Cases on Sales.

Agency (including Master and Servant). Professor THURSTON. Three hours a week. Wambaugh's Cases on Agency.

SECOND YEAR SUBJECTS.

First Half-Year.

Property. Professor VANCE. Two hours a week. Gray's Cases on Property, Volumes II and V.

Common Law Pleading and Practice. Professor CLEPHANE. Two hours a week. Tyler's Stephen on Pleading.

Evidence. Professor PETER. Two hours a week. McKelvey on Evidence and Thayer's Cases on Evidence.

Corporations. Professor LORENZEN. Two hours a week. Smith's Cases on Corporations.

Insurance. Professor VANCE. Three hours a week. Vance's Cases on Insurance.

Quasi Contracts. Professor THURSTON. Three hours a week. Scott's Cases on Quasi Contracts.

Second Half-Year.

Property. Professor VANCE. Two hours a week. Gray's Cases on Property, Volumes II and V.

Evidence. Professor PETER. Two hours a week. McKelvey on Evidence and Thayer's Cases on Evidence.

Bills and Notes. Professor LORENZEN. Three hours a week. Huffcut's Cases on Negotiable Instruments. [Not given in 1907-08.]

Equity Pleading. Professor CLEPHANE. One hour a week. Van Zile on Equity Pleading and Practice.

Equity. Professor DENNIS. Two hours a week. Scott's Cases on Equity.

Suretyship. Professor VANCE. Three hours a week. Ames' Cases on Suretyship.

Partnership. Professor PEELLE. One hour a week. Burdick on Partnership.

Corporations. Professor LORENZEN. Two hours a week. Smith's Cases on Corporations.

THIRD YEAR SUBJECTS.

During the session of 1907-08 third year students may select from the following courses such subjects as, together with the required work already taken, will make up the required minimum of ten hours a week. Such students are permitted, however, subject to approval of the Dean, to choose not more than two of the courses offered to the fourth year students.

Elections of courses to be taken must be made in all cases within ten days after the beginning of the semester in which such courses are given.

First Half-Year.

Moot Court. Professors CLEPHANE, EARNEST, and PETER. Two hours a week. (*Required.*)

Equity. Professor DENNIS. Two hours a week. Scott's Cases on Equity.

Property. Professor VANCE. Two hours a week. Tiffany on Real Property.

Trusts. Professor THURSTON. Two hours a week. Ames' Cases on Trusts.

Conflict of Laws. Professor LORENZEN. Two hours a week. Dwyer's Cases on Conflict of Laws.

Legal Tactics. Professor CLEPHANE. One hour a week.

International Law. Professor BREWER. One hour a week. Taylor's International Law.

Federal Procedure. Two hours a week.

Second Half-Year.

Moot Court. Professors CLEPHANE, EARNEST, and PETER. Two hours a week. (*Required.*)

Mortgages. Professor CLARK. Three hours a week. Wyman's Cases on Mortgages.

Wills and Administration. Professor PETER. One hour a week.

Municipal Corporations. Professor DENNIS. Two hours a week. Smith's Cases on Municipal Corporations.

International Law. Professor BREWER. One hour a week. Taylor's International Law.

Conflict of Laws. Professor LORENZEN. Two hours a week. Dwyer's Cases on Conflict of Laws.

Organization and Management of Corporations. Professor CLEPHANE. One hour a week. Clephane on the Organization and Management of Corporations.

Brief-Making and Legal Bibliography. Professor BRANDENBURG. One hour a week. Text-book on Brief-Making.

B. Leading to the Degree of Master of Laws.

Students admitted to the fourth year as candidates for the degree of Master of Laws are required to elect courses, not previously taken, covering a minimum of ten hours a week. These may be freely elected from the subjects given below, which are considered by the Faculty especially suited to the needs of students who have already completed an undergraduate course in law. The student may, however, choose as electives two other subjects offered by the Faculty of Law which he has not taken during his undergraduate course. The practice work offered in the fourth year Moot Courts may be taken and will be counted as two hours of required work.

FOURTH YEAR SUBJECTS.

Comparative Constitutional Law. President Needham. Two hours a week. One year.

International Law. Professor Scott. Three hours a week. One year. Scott's Cases on International Law.

Moot Court. Professors Clephane, Earnest, and Peter. Two hours a week. One year.

Interstate Commerce Law. President Needham. Two hours a week. One year.

Civil Law I—Roman Law. Professor Lorenzen. Two hours a week. One year. Sohm's Institutes of Roman Law.*

Taxation. Professor Thurston. Three hours a week. One-half year. Goodnow's Cases on Taxation.

Water rights. Professor Vance. One hour a week. One-half year. Long on Irrigation.

Bankruptcy. Professor Brandenburg. Two hours a week. One-half year. Brandenburg on Bankruptcy.

Admiralty. Professor Scott. Two hours a week. One half year. Ames' Cases on Admiralty.

Extraordinary Legal Remedies. Two hours a week. One-half year. Roberts' Cases on Extraordinary Legal Remedies.

Civil Law II—Spanish-American Law. Professor Lorenzen. Three hours a week. One-half year.†

C. Leading to the Degree of Master of Patent Law.

A special course in Patent Law and Patent Law Practice is given by Professor Church. The purpose of this course is to prepare those

* Students electing Roman Law should possess some knowledge of Latin.

†Students electing Spanish-American Law should possess a reading knowledge of Spanish and have had previous instruction in Roman Law.

taking it for practice in all matters involving the law of patents. The course extends throughout one year, with two lectures or sessions of the Moot Court each week.

D. Leading to the Degree of Doctor of Jurisprudence.

The purpose of these courses is primarily to give to the student a more thorough and comprehensive knowledge of International Law, of the History of Law, and of Comparative Public and Private Law in order that he may attain a sounder and more philosophic understanding of the principles that underlie our own municipal law. The training and knowledge acquired in these courses will prove specially beneficial to those who desire to fit themselves for the foreign service, for the conduct of cases before international tribunals, and for the general practice in matters involving the laws of foreign countries. The method of instruction and requirements for the degree are set forth on page 177.

Subject to the approval of the Faculty, the student may select his major and minor subjects from the following courses offered:

I. Roman Law:

Offered by Professor Lorenzen.

1. History and Sources of Roman Law Before the Time of Justinian.
2. The Institutes of Gaius and the *Corpus Juris* of Justinian.
3. History of the Law during the Middle Ages.
4. Seminary in Roman Law.

II. The History of Law:

Offered by Professor Vance.

1. Origin and Growth of the Common Law of England.
   Offered by Professor Scott.
2. Seminary in the History of Law.

III. International Law:

Offered by Professor Scott.

1. International Law.
2. Seminary in International Law.

IV. Constitutional Law:

Offered by Professor Harlan.

1. Constitutional Law.
   Offered by President Needham.
2. Comparative Constitutional Law.

V. Comparative Private Law:

Offered by Professor Lorenzen.

1. Comparative Commercial Law.
2. SpanishAmerican Law.*

ELECTIVE COURSES IN OTHER DEPARTMENTS OF THE UNIVERSITY.

Students taking a full course for a degree may be admitted, without additional fee except laboratory fees, to courses for which they are qualified in the Departments of Arts and Sciences and of Politics and Diplomacy, provided such courses do not exceed in the aggregate six hours a week.

COURSES IN PRACTICE.

A. Moot Court Work.

1. *Third Year:*

Particular stress is laid upon Moot Court Work. Aside from the practice court connected with the course in Patent Law, there are four courts in which the candidates for the degree of Bachelor of Laws pursue their work. Three of these are *nisi prius* courts and are presided over by members of the Washington Bar in active practice. The fourth is a Court of Appeals to review the cases tried in the courts of first instance. This court also is composed of members of the Washington Bar.

Every third-year student before receiving the degree of Bachelor of Laws is required to prepare the pleadings in and prosecute to judgment the required number of cases in the *nisi prius courts,* with the privilege of appeal to the appellate tribunal. At least two hours in each week during the year must be spent by each third-year student in active participation in Moot Court work in the court-room to which he is assigned.

Statements of facts are furnished, such as would be related to a lawyer in active practice by his client. Each student must determine whether or not upon such facts the particular case in hand is one of common-law or equitable cognizance. He must then frame his pleadings, serve his writs, and answer his adversary's pleadings until issue is joined in legal manner, after which the case is brought on for hearing in strict accordance with the rules of actual practice. Juries are empaneled in accordance with settled legal procedure, witnesses are examined and cross-examined, and the case conducted through all the various stages of the trial or hearing down to and including the judgment or decree,

*A reading knowledge of Spanish is required.

after which, should the case be appealed, it must be carried through the appellate court, involving the preparation of the record on appeal, briefs of counsel, etc.

2. *Fourth Year:*

The same facilities for Moot Court work as are described above are afforded in the course leading to the degree of Master of Laws. In this course, however, the nature of the cases assigned is somewhat different, involving, in addition to the ordinary cases at common law or in equity, cases of a special character, such as habeas corpus, certiorari, quo warranto, injunction, mandamus, extradition, replevin, attachment, etc.

3. *Officers and Equipment:*

The clerk of the Moot Court was formerly one of the assistant clerks of the Supreme Court of the District of Columbia, but his assistants in each court-room are chosen from the student body, from whose ranks are also drawn the criers, jurors, and other officials, thus giving to the students the benefit of pactice in administrative judicial machinery. The Moot Court is to all intents and purposes an actual court. The rooms in which the sessions are held are fitted up with judges' benches, clerks' desks, jury-boxes, and counsel table, and from the time the crier announces that the court is in session until he announces its adjournment the procedure is identical with that of a regular judicial tribunal.

It is believed that any student who gives the proper attention to this feature of the law curriculum will be enabled to go out from this institution and creditably try cases in court, although he may never have been in an actual court-room.

A careful record is kept of the work of each student, both as to his pleadings and his conduct of the case in court, and the ratings thus given determine, in connection with his ratings upon other subjects, whether or not he is entitled to a degree.

B. Legal Tactics.

Every young lawyer entering upon his professional career is desirous of availing himself of the experience of an older practitioner and of learning many things which are not taught and cannot be taught from books. It is to meet the needs of this class of men that this course has been inaugurated. It is in charge of a member of the Washington Bar whose practice has been an active one, extending over a period of many years.

A short introductory talk is given upon the relations between attorney and client, including the important subject of fees, after which the student is given the benefit of practical hints upon the manner of start-

ing in practice and opening and furnishing an office, with suggestions as to office systems. Then a drill is given upon contract drafting, involving the preparation by the student of leases, contracts, wills, etc. The students' papers are carefully examined by the instructor and criticised, prevalent errors and the proper manner of curing them being pointed out in the class-room.

The student is told how to listen intelligently to his client's grievances; how to draw up the pleadings arising out of these grievances; how to prepare for trial the case thus made, including the work of preparing the evidence; how to try the case and examine and cross-examine witnesses; the manner of making up the record, writing briefs, and conducting the argument on appeal. The subject of professional ethics is discussed. At various times during the year distinguished lawyers are invited to appear and discuss informally special topics of interest to the students.

EXAMINATIONS.

A. Undergraduate Courses.

Regular Examinations:

Written examinations upon all required subjects are held at the close of each semester upon those subjects that have been completed during that semester. All students, unless specially excused by the Dean, are required to take the first examination held in any subject after their completion of the course in that subject.

No student, except by special permission of the Dean, will be allowed to take an examination in any subject unless he shall be regularly registered and have been in regular attendance upon the lectures and have done all the work required in the course of instruction upon that subject.

Conditions:

The regular examinations for the removal of conditions will be held during the first week of each session. Applications for permission to take any of these examinations must be made to the Dean, in writing, not later than three days before the date for which such examination is scheduled. Candidates for the degree of Bachelor of Laws who have not more than one condition in the subjects completed during the first semester of the third year may be given examinations for the removal of such conditions during the last week in May.

Class Standing:

Students having conditions in more than two subjects will not be advanced from one class to another. Students may have, however, an opportunity to remove conditions, imposed during any session by

taking the regular examinations for the removal of conditions at the beginning of the following session, for which no fee is charged.

Students having conditions in more than three subjects will not be allowed to register except upon special permission from the Dean.

Special Examinations:

No special examinations, other than those above provided for, will be granted to any students except those of the graduating class who, for good cause, shall have been excused by the Dean from taking any regular examination during the third year.

B. Graduate Courses.

Examinations in graduate courses will be given at such times and under such conditions as may be designated by the professors in charge.

DEGREES.

1. Bachelor of Laws.

The degree of Bachelor of Laws will be conferred upon students who shall have passed satisfactory examinations upon the subjects required in the entire course of three years and whose attendance and conduct have been satisfactory to the Faculty.

2. Master of Laws.

The degree of Master of Laws will be conferred upon students who have successfully completed the work prescribed for the fourth year and whose attendance and conduct have been satisfactory to the Faculty.

3. Master of Patent Laws.

The degree of Master of Patent Law will be conferred upon students who shall have successfully completed the work of the Patent Law course and whose attendance and conduct have been satisfactory to the Faculty.

4. Doctor of Jurisprudence.

The degree of Doctor of Jurisprudence is given for graduate work in the science of the law upon the same terms and conditions as the degree of Doctor of Philosophy in the Departments of Arts and Sciences and of Politics and Diplomacy.

The degree is conferred upon students already qualified as candidates for the degree who have pursued advanced legal studies and engaged in original research in some special branch of law under University auspices for a period of not less than three years, two of which shall be in residence, and have submitted an acceptable thesis and met all the

requirements prescribed. The degree is given, however, not because of the faithful completion of a course of study according to a stated program for a given length of time, but for high attainments and proved ability to do research work in some special branch of law, as determined by the various tests applied.

The applicant may be credited with graduate work done at other universities, provided that such work is shown to be of grade and nature similar to that required here, but at least one year must be spent in residence at this University, and the other reqirements of the degree as prescribed here must be fulfilled.

Every candidate immediately after qualifying for the degree of Doctor of Jurisprudence shall designate one principal or major subject and two subordinate or minor subjects, the selection to be approved by the Faculty. The major subject and at least one of the two minors must be topics taught in the Department of Law and Jurisprudence; the other minor may be chosen from any graduate work in the University properly relative to his major and approved by the Faculty. The major and minors must be pursued under the guidance of a committee consisting of the professors in charge of the subjects chosen, with the professor in the major subject as chairman. This committee shall determine his division of time, study, and research among the major and minor topics, but in general at least one-half of the whole time spent in graduate work should be devoted to the major subject and one-fourth of the time to each of the minor subjects.

The candidate must attend the seminary work in his major subject and take the graduate courses given in his major and minors.

The candidate shall pass satisfactory examinations upon the three subjects selected, which may be taken on the fulfilment of the requirements as to residence or at such other times as may be fixed by the committee in charge of such candidate. In his major subject the candidate must show special attainments, and is liable to minute examination upon the whole ground which it covers. He is also expected to have a good general knowledge of the field contained within his two minor subjects.

A satisfactory thesis must be presented by the candidate, together with an exhaustive bibliography, exhibiting independent research in some branch of his major subject, not later than January 15 or May 1 in the year in which the degree is sought, according as he prososes to be graduated at the Winter Convocation or at Commencement.

After their acceptance theses are the property of the University, and must be deposited in the University archives, but authors are permitted to make copies. All theses must be typewritten on official theses paper, which may be obtained from the Assistant Treasurer of the University.

No thesis for the degree of Doctor of Jurisprudence shall be submitted to the Faculty until it has been approved by the professor in supervision of the major topic, and also by a co-referee to be appointed by the Faculty. The referees shall present to the Faculty written reports of the thesis, to be filed therewith.

The candidate is expected to print his thesis, under the supervision of the professor in charge of his major topic, within one year after the degree is conferred, and shall present one hundred copies to the University, to be distributed among institutions of learning.

The candidate must defend his thesis in the presence of the Faculty or of so many of its members as may be designated by the Faculty.

LAW LIBRARY AND READING-ROOM.

A well-equipped working library, comprising more than 4,500 volumes, is open to the students in Law Lecture Hall from 9 a. m. to 10 p. m. Competent librarians are in charge and will give students assistance in looking up subjects and in the use of books.

The Library contains the standard textbooks, the West Reporter system of Federal and State Decisions complete, State Reports, the English Common Law and Chancery Reports, Encyclopædias of Law, Digests, reference books, and current law publications.

Adjoining the Library is a conversation-room for students, affording opportunity for consultation.

In addition to these facilities, the students have free access to the Congressional Library and other public libraries.

PRIZES.

A prize offered by the Edward Thompson Company, of a set of the Encyclopædia of Law, first or second edition, or a set of the Encyclopædia of Pleading and Practice, is awarded each year to the senior law student who shall write the best thesis on some legal subject to be assigned by the Faculty.

Three prizes—one of $40, one of $30, and one of $20—are annually given to the respective authors of the best three essays handed in by such members of the Third-Year Class as shall compete for them and shall pass successful examinations.

A prize of $25 in gold, offered by Mr. Fritz von Briesen, called the "Ellsworth Prize," is awarded for the best work done in the Patent Law Course by a student receiving the degree of Master of Patent Laws.

PRIZE ESSAY IN COMPARATIVE LAW.

In order to stimulate interest in the study of Comparative Law, not only in this University but throughout the United States and Canada, a prize of $100.00 is awarded each year to the writer of the best essay on some topic in Comparative Law, to be assigned by the Faculty. Competition for this prize is open to all *bona fide* students regularly matriculated in any law school in the United States, Mexico, or Canada. All essays must be submitted each year on or before March 1, and after they have been passed upon by a committee of one or more persons not connected with this University, the award will be announced June 1. Essays should be sent to the secretary of the Faculty. The subject assigned for the year 1906-07 was as follows:

A discussion, under English, French, and German law, of the respective rights of parties to a contract entered into under a mistaken apprehension on the part of one or both parties as to its legal effect.

John H. Wigmore, Dean of the Northwestern University Law School, and Samuel Williston, Weld Professor of Law in Harvard Law School, form the committee of award for the year 1906-07.

The following subject is assigned for the year 1907-08:

A comparative treatise upon the rights of one purchasing chattels from a seller whose title is defective, under the laws of the United States, England, France, and the Spanish-American countries.

PUBLIC SPEAKING.

Excellent facilities for training in the art of public speaking are afforded by the two debating societies that have been organized in the Department of Law and Jurisprudence. These societies, known as the Columbian and Needham Debating Societies, meet weekly for debate in Law Lecture Hall. Membership in these societies is entirely optional, but their work is encouraged in every legitimate way by the Faculty, and students are urgently advised to take part in their exercises. During each academic year several intercollegiate debates are held. Membership upon the intercollegiate debating teams is an honor eagerly sought and made the prize to be won in separate preliminary contests. The general conduct of these intercollegiate debates is under the supervision of a committee from the Faculty.

INSTRUCTION IN ORATORY.

Instruction in Oratory is under the charge of Mr. Robert Hickman. The course given is designed to afford practical and effective training in the art of public speaking, argumentation, and debate.

The instructor's work is principally done in connection with the sessions of the University Congress, a legislative body modeled after the

Congress of the United States, and composed of members of Mr. Hickman's classes and such other students as are admitted to it in accordance with its regulations. The sessions of this organization afford Mr. Hickman the opportunity to give practical demonstration of the application of the theoretical principles governing the art of oral expression, as well as to give thorough training and practice in parliamentary law and procedure.

ADMISSION TO THE BAR OF THE DISTRICT OF COLUMBIA.

By the rules of the Supreme Court of the District of Columbia, applicants for admission to the Bar are required to have studied law for three years under the direction of a competent attorney, but by those rules the course in the Department of Law of the University is regarded as discharging this requirement.

FEES.

1. Matriculation fee (payable only on first entry into the University) $5
2. Library fee per annum 2
3. Tuition fees per annum:
   For the regular three year course.....150
   For the four year course (nine hours per week)..... 120
4. Fee for graduation 10
5. Tuition fee for course in Patent Law..... 40
6. Tuition fee per annum for any year repeated once..... 75
7. Tuition fees per annum for special courses are noted on page 121, paragraph 6.
8. Fee for a certificate under the seal of the University..... 2

No change will be made in the fees fixed at the time of registration except in case of withdrawal, and then only upon notice in due form, and from the end of the current quarter session when such withdrawal shall be approved. Applications for the granting of a withdrawal should be made on the prescribed form to be obtained from the Registrar and will only be received at the end of a quarter session.

The library fee will not be charged for the first half-year during which a course is completed in the case of students who enter at the beginning of the second half-year and pay the library fee for that year.

PAYMENT OF FEES.

All fees are to be paid to the Treasurer. Regular tuition fees are payable quarterly in advance. Fees for special courses are payable monthly in advance. Matriculation and library fees are payable in full in advance.

BOARD AND ROOMS.

A register of approved boarding houses is kept by the Treasurer. Accommodations cost from $25 to $40 a month.

For catalogues, application blanks, and further information address

THE REGISTRAR,
The George Washington University,
Washington, D. C.

National College of Pharmacy.

FACULTY.

CHARLES WILLIS NEEDHAM, LL.D.....PRESIDENT OF THE UNIVERSITY
HENRY E. KALUSOWSKI, M.D., Phar.D.....Dean and Professor of Pharmacy
SAMUEL WAGGAMAN, M.D., Phar.D.....Professor of Materia Medica, Botany and Toxicology
WILLIAM F. HILLEBRAND, Ph.D., Phar.D.....Professor of Chemistry and Physics
FREDERICK A. HOLTON, B.S., Phar.D...Professor of Analytical Chemistry
BURTON J. HOWARD, B.S.....Professor of Microscopy
HOWARD M. BRADBURY, Phar.D.....Assistant to the Professor of Analytical Chemistry
HARRY A. CANDEE, Phar.D.....Assistant to the Professor of Pharmacy
CYRUS W. NELSON, B.S.....Assistant to the Professor of Pharmacy
FRED H. PITZER.....Assistant to the Professor of Pharmacy
*——— .....Professor of Mercantile Pharmacy
*——— .....Professor of Pharmaceutical Jurisprudence

GENERAL STATEMENT.

The National College of Pharmacy, which is an outgrowth of the Columbian Pharmaceutical Association, organized in April, 1871, was chartered under the provisions of an act of Congress in 1872, and opened its doors to students November 11th of that year. In February, 1906, it became a member of the educational system of The George Washington University, under the charter of the University granted by Congress March 3, 1905, providing for the organization of colleges. The President of the University is *ex-officio* president of the National College of Pharmacy, and the College is represented in the President's Council by its Dean.

The work of the college embraces courses in chemistry and toxicology, materia medica, botany, pharmacy, analytical chemistry, and pharmaceutical laboratory work and microscopy. Courses have recently been added in mercantile pharmacy and pharmaceutical jurisprudence. Three years are required for the completion of the prescribed course.

The new College building is centrally located on I street, northwest, between Eighth and Ninth streets. It is easily reached by either of the four principal street car lines of the city.

*To be appointed.

SPECIAL COURSES.

Students may select one or more of the branches taught and attend the lectures and laboratory work during the time set apart for such study.

Students taking single tickets are not entitled to take the examinations for the degree conferred by the College.

THE DEGREE.

The degree conferred is *Doctor of Pharmacy.*

QUALIFICATIONS FOR THE DEGREE.

1. He shall have attended three courses of instruction in Chemistry, Pharmacy, Analytical Chemistry, Materia Medica, Botany, and Toxicology, and two in Microscopy, the last of which must have been in this College; and one course each in Mercantile Pharmacy and Pharmaceutical Jurisprudence.

2. He must have passed a satisfactory examination in each of the branches taught.

3. He must be recommended by the Board of Examiners.

MATERIA MEDICA, BOTANY AND TOXICOLOGY.

Freshman Course.

The first lectures are an introductory to the study of elementary botany, after which follow vegetable histology and plant physiology. The subject-matter of these lectures is thoroughly explained by means of charts, diagrams, and specimens.

Junior Course.

This course is devoted to the consideration of the various theories concerning the vegetable world and the practical results obtained by experienced laborers in this science. The lectures are illustrated by means of the lantern and microscope. A large part of the course is devoted to a consideration of the official organic drugs.

Senior Course.

The lectures are mainly upon the active principles, adulterants, official preparations, therapeutic uses, and doses; after which the organic and inorganic poisons are taken up under three heads: 1st, Corrosive; 2d, Irritant; and 3d, Neurotic Poisons. Under these three divisions are explained briefly their action, detection, and antidote.

PHARMACY.

Freshman Course.

This course is given to the study of the various pharmaceutical processes and operations. Following in the order named are lectures on Metrology, heat, thermometry, evaporation, distillation, fusion, sublimation, calcination granulation, comminution, solution, filtration, clarification, decoloration, precipitation, crystallization, and extraction, during which the various methods used to bring about the desired results will be illustrated.

Junior Course.

During a part of this course the time is given to the application of the processes considered during the Freshman year to pharmacopœial preparations, and such modifications as adapt them to special uses. This includes methods for making solutions of various substances, extracts, pills, tablets, triturates, compressed tablets, capsules, powders, suppositories, plasters, ointments, cerates, and oleates.

The latter part of this course is taken up with the study of official preparations obtained from the elementary bodies beginning with bromine, chlorine, iodine, phosphorus, and sulphur, followed by carbon, boron, silicon, the inorganic acids. potassium, sodium, lithium, ammonium, magnesium, calcium, barium, zinc, aluminum, cerium, cadmium, manganese, iron, chromium, lead, silver, copper, mercury, antimony, arsenic, bismuth, and gold.

Senior Course.

The time during this course is mainly given to the study of compounds chiefly derived from organic matter, and products obtained therefrom, amylaceous and saccharine substances; gulcosides and alkaloids, volatile oils and animal products commonly used in pharmacy, vegetable oils, soaps, resinoids and products from resins.

ANALYTICAL CHEMISTRY.

The instruction in this department is intended to present the chemical tests of the United States Pharmacopœia, with methods for the identification of substances and for the detection of impurities; to instruct him in the methods of assaying and the use of volumetric solutions, and to enable students to analyze any ordinary mixture of inorganic material.

For the purpose of carrying out the work of this department a large, well-equipped laboratory is provided with all the usual water and gas facilities, and has recently been wired and installed with electric appa-

ratus whereby electro-chemical methods of analysis can be taught and the application of the electric current to the preparation of chemicals by the methods of electro-chemistry can be illustrated before the students. These and other facilities afford students exceptional opportunities to become familiar with the fundamental principles of the science of chemistry.

The first year is devoted to experimental work so arranged as to supplement the lectures in General Chemistry.

The second year covers a systematic course in qualitative analysis in connection with the tests of the United States Pharmacopœia.

The third year is devoted to volumetric analysis by means of the standard solutions of the Pharmacopœia.

GENERAL CHEMISTRY AND PHYSICS.

Inasmuch as the subjects of Analytical Chemistry and Pharmacy are fully provided for in other courses, these lectures are devoted more closely to the fundamental principles and classification which must underlie a thorough and systematic knowledge of Chemistry. Owing to the intimate connection existing between Chemistry and several branches of Physics, a number of lectures illustrating the more important laws and principles of some of these branches precedes the regular course in Chemistry, and others on these subjects with which a prior acquaintance is less important, follow after the student has acquired some knowledge of chemical changes. During the first half of the second year Physics and the non-metallic elements receive consideration, followed during the remainder of the second and a portion of the third year by the metals. The greater portion of the third year is devoted to the exposition of the more important facts, principles, and theories of Organic Chemistry.

MICROSCOPY.

This College has established a separate course in this branch and requires full attendance from Junior and Senior students. The course of Microscopy gives instruction in the use of the compound microscope as an aid in the study and identification of drugs.

The work includes both lectures and laboratory courses, and consists in the examination of plant tissue as illustrated in various vegetable substances most familiar to pharmacists. Special attention is given to the structural characteristics by which one drug can be distingushed from another as well as to the detection and identification of the most common adulterants used.

MERCANTILE PHARMACY AND PHARMACEUTICAL JURISPRUDENCE.

These courses are required in the Senior class only. The names of the lectures and titles of text-books will be announced later.

FEES.

Matriculation	$5
Tickets for the full year's course of instruction, Freshman or Junior.	70
Tickets for the full year's course of instruction, Senior	80
Single tickets for Chemistry, Materia Medica, Botany and Toxicology, each	15
Single tickets for Analytical Chemistry	20
Single tickets for Practical Pharmacy	20
Single tickets for Microscopy	10
Single tickets for Mercantile Pharmacy	5
Single tickets for Pharmaceutical Jurisprudence	5
Fee for Diploma	10

SCHEDULE.

The thirty-fifth annual session of the College will begin on Wednesday, September 25, 1907, and close on Wednesday, June 5, 1908.

Monday.	Tuesday.	Wednesday.
FRESHMEN.	SENIORS.	FRESHMEN.
Botany. Lectures and Recitations, 10 to 11 a. m.	Microscopy. Lectures, Laboratory Work and Recitations, 6 to 8 p. m. October 5 to February 12.	Physics and General Chemistry. Lectures and Recitations, 6 to 7 p. m.
Pharmacy. Lectures and Recitations, 11 a. m. to 12 m. Recess, 12 m. to 1 p. m.	Mercantile Pharmacy. 8 to 10 p. m. Feb. 12 to End of Term.	Analytical Chemistry. Lectures, Recitations and Laboratory Work, 7 to 11 p. m.
Pharmacy. Laboratory Work, 1 to 4 p. m.	Pharmaceutical Jurisprudence. 8 to 9 p. m.	
JUNIORS.		
Physics and General Chemistry. Lectures and Recitations, 6 to 7 p. m.		
Analytical Chemistry. Lectures, Recitations and Laboratory Work, 7 to 11 p. m.		

SCHEDULE.

Thursday.	Friday.	Saturday.
SENIORS.	SENIORS.	JUNIORS.
Materia Medica and Toxicology. Lectures and Recitations, 10 to 11 a. m.	General and Organic Chemistry. Lectures and Recitations, 6 to 7 p. m.	Botany and Materia Medica. Lectures and Recitations, 10 to 11 a. m.
Pharmacy. Lectures and Recitations, 11 a. m. to 12 m. Recess, 12 m. to 1 p. m.	Quantitative Chemical Analysis. Lectures and Recitations, 7 to 11 p. m.	Pharmacy. Lectures and Recitations, 11 a. m. to 12 m. Recess, 12 m. to 1 p. m.
Pharmacy. Laboratory Work, 1 to 4 p. m.		Pharmacy. Laboratory Work, 1 to 4 p. m.
JUNIORS.		
Microscopy. Lectures, Laboratory Work and Recitations, 6 to 8 p. m.		

Entrance examination at 1 p. m. on Thursday, September 19, 1907, the lecture-room of the College. Annual examination of Freshmen and Juniors for promotion and of Seniors for graduation begins on Monday, May 11, 1908.

PART III.

STUDENTS IN THE UNIVERSITY.

DEGREES CONFERRED, MISCELLANEA.

Students in the University.

DEPARTMENT OF ARTS AND SCIENCES.

GRADUATE STUDIES.

Master of Arts.

Name. Legal residence. City address.

Crawford, Angus McDonald.....Va. .....Alexandria, Va.
A.B., 1906, The George Washington University.
Topics—Major, English Literature; Minors, French, German.

Edler, August Friedrich Wilhelm.Germany ...3513 Center Street.
A.B., 1906, The George Washington University.
Topics—Major, Germanics; Minors, History, International Law.

Kramer, Stephen Elliott.....D. C. .....1318 S Street, N. W.
B.S., 1906, The George Washington University.
Topics—Major, Pedagogical Psychology; Minors, Political Theory, Sociology.

McMahon, Margaret Agnes.....N. Y. .....1342 R Street, N. W.
B.S., 1906, The George Washington University.
Topics—Major, American History; Minors, English History, English.

Moore, Robert Irwin.....Tenn. .....1408 M Street.
B.A., 1898, Vanderbilt University.
Topics—Major, Contemporaneous History; Minors, Latin, Industrial Evolution.

Paddock, Ernest Moorhead.....Pa. .....934 North Ave., Allegheny, Pa.
A.B., 1894, University of Pennsylvania, Graduate, 1897, Episcopal Theological School, Cambridge, Mass.
Topic—Philosophy.

Ross, John Elliot.....D. C. .....614 19th Street.
A.B., 1902, Loyola College.
Topics—Major, English; Minors, History, Economics.

Russell, Alice Dyar.....Minn. ...,.318 Patent Office
B.A., 1903, Minnesota State University.
Topics—Major, Philosophy; Minors, Sociology, Economics, History and Psychology of Religion.

Sniffin, William Webb.....D. C. .....312 N. C. Ave., S. E.
A.B., 1906, The George Washington University.
Topics—Major, French of 19th Century; Minors, Spanish, English.

Name.	Legal residence.	City address.

Walsh, Daniel Michael.....Vt. .....Lincoln Apartment.
B.S., 1904, University of Vermont.
Topics—Major, Economics; Minors, History, Political Theories.

Young, Julia Elektra Ludlow.....N. Y. .....Nat'l Cathedral School.
B.A., 1906, Barnard College, Columbia University.
Topics—Major, Latin; Minors, Greek, Archæology.

Master of Science.

Coffey, George Nelson.....N. C. .....1225 11th Street.
Ph.B., 1900, University of North Carolina.
Topics—Major, Principles of Soil Classification; Minors, Practical Meteorology, Mineralogy.

Gilbert, Walter Merwin.....N. Y. .....1831 G Street.
B. S., 1899, College of City of New York.
Topics—Major, Philosophy; Minors, English, Philosophy of Hegel.

Goodnow, Edward Harold.....Mass. .....1327 M Street.
B.S., 1905, Worcester Polytechnic Institute.
Topics—Major, Physical Chemistry; Minors, Organic Chemistry, Mathematics.

Harrington, Katherine .....D. C. .....Conduit Road.
B.S., 1906, The George Washington University.
Topics—Major, Higher Differential Equations; Minors, Light, Experimental and Mathematical, Organic Chemistry.

Houghton, Harry Wilson.....Md. .....Glen Echo, Md.
B.S. in Chemistry, 1906, The George Washington University.
Topics—Major, Biochemistry; Minors, Stereo-chemistry, Hygiene.

Sanders, Frances .....D. C. .....1360 Kenyon Street.
B.S., 1901, Columbian University.
Topics—Major, Mathematics; Minors, Applied Mechanics., Philosophy.

Smith, Delos Hamilton.....D. C. .....1905 F Street.
B.S. in Architecture, 1906, The George Washington University.
Topics—Major, Architectural Design; Minors, Architecture.

Smith, Edwin, Jr.....Md. .....Rockville, Md.
B.S. in Chemistry, 1906, The George Washington University.
Topics—Major, Researches in Electrochemisty; Minors, Bacteriology, Economic Geology.

Taber, Walter Cox.....Calif. .....Bureau of Soils.
A.B., 1898, Leland Stanford, Jr., University.
Topics—Major, Chemistry; Minor, Mathematics.

In Attendance.

Name. Legal residence. City address.

Custis, Horace Hatch.....D. C. .....912 15th Street.
B.A., 1906, Johns Hopkins University.
Topic—Chemistry.

Graves, Sheldon Heber.....D. C. .....1221 K Street.
B.S., 1904, M. S., 1906, The George Washington University.
Topic—Electrical Engineering.

Heininger, Lewis .....Ohio .....2514 13th Street.
A.B., 1887, A.M., 1890, North Western College.
Topic—Botany.

Keith, Oscar Lovell.....D. C. .....16 3d Street, S. E.
A.B., 1902, University of Georgia, A.M., 1904, Harvard University.
Topic—French.

Kolbe, Lawrence Albert.....Ohio .....Bureau of Soils.
A.B., 1904, Oberlin College.
Topic—Geology.

Lamson, Eleanor Annie.....D. C. .....2439 18th Street.
B.S., 1897, M.S., 1899, Columbia University.
Topic—Celestial Mechanics.

Owen, Frederick Denison.....Conn. .....3 Grant Place.
B.S., 1905, M.S., 1906, The George Washington University.
Topics—Archæology, Æsthetics.

Shields, Walter Clement.....Pa. .....1335 Connecticut Ave.
Topics—English.

Teegarden, Alice May.....Pa. .....Kendall Green.
B.A., 1906, Blairsville College.
Topic—Archæology.

Doctor of Philosophy.

Alden, Levi Russell.....D. C. .....809 L Street.
B.A., 1903, M.A., 1904, Columbian University.
Topics—Major, American History; Minors, History of English Law, Mediæval History.

Backus, Cyrus Day.....N. Y. .....U. S. Patent Office.
Ph.B., 1896, LL.B., 1896, Cornell University; B.S., 1904, Columbian University; M.S., 1905, The George Washington University.
Topics—Major, Electrical Engineering; Minors, Physics, Chemistry.

Brodthage, Rev. George.....Germany ..320 4½ Street, S. W.
Maturity for University studies, Strassburg; 12 semesters University of Strassburg, Berlin, Göttingen.
Topics—Major, Germanics; Minors, History, Philosophy.

Name. Legal residence. City address.

Church, Calvin Grant.....Md. .....111 12th Street, S. E.
B.S., 1900, Maryland Agricultural College.
M.S., 1902, Columbian University.
Topics—Major, Agricultural Chemistry; Minors, Physical Chemistry, Analytical Chemistry.

Clark, Marion .....Md. .....Cecilton, Md.
B.A., 1901; M.A., 1903, Western Maryland College.
Topics—Major, American History; Minors, Constitutional Law, International Law.

Day, Herbert Ernest.....D. C. .....Kendall Green.
Ph.B., 1893, Brown University.
M.A., 1895, Gallaudet College.
M.A., 1901, Columbian University.
Topics—Major, American History; Minors, English History, American Literature.

Doan, Mary .....Ind. .....10th St. and Grant Pl.
B.S., 1891, M.S., 1893, Purdue University.
B.L., 1892, Earlham College.
Topics—Major, English Literature; Minors, Sociology, Philosophy.

Doyle, Aida Mary.....Penn. .....1123 Dartmouth Street.
B.S., 1898, M.S., 1899, Columbian University.
Topics—Major, Chemistry; Minors, Agricultural Chemistry, Geology.

Edler, August Friedrich Wilhelm.Germany ...3513 Center Street.
B.A., 1906, M.A., 1907, The George Washington University.
Topics—Major, The Foreign Policy of Friedrich II. (History of Prussian Politics during 18th century); Minors, Political Theory, American Politics.

Gardner, James Henry.....Ky. .....U. S. Geological Survey.
B.S., 1900, M.S., 1906, Kentucky State College.
Topics—Major, Economic Geology; Minors, Stratigraphic Geology, Zoölogy.

Grover, Frederick Warren.....Mass. .....409, The Ontario.
B.S., 1899, Massachusetts Institute of Technology.
M.S., 1901, Wesleyan University.
Topics—Major, Physics; Minors, Mathematics, Celestial Mechanics.

Hall, Percival .....D. C. .....Kendall Green.
B.A., 1892, Harvard University.
M.A., 1893, Gallaudet College.
M.D., 1890, Columbian University.
Topics—Major, Pure Mathematics; Minors, Applied Mathematics, Astronomy.

Heth, Eva Virginia.....D. C. .....1759 Church Street.
A.B., 1892, A.M., 1893, Columbian University.
Topics—Major, Latin; Minors, German, Classical Archæology.

Name. Legal residence. City address.

Hillyer, William Eldridge.....D. C. .....1365 Park Road.
B.S., 1899, M.S., 1900, Columbian University.
Topics—Major, Chemistry; Minors, Electro-chemistry, Alternating Current Theory and Machinery.

Hinman, Ida .....Iowa .....1529 Q Street.
B.S., 1892, A.M., 1902, Columbian University.
Topics—Major, English; Minors, German, French.

Huidekoper, Frederic Louis.....D. C. .....1614 18th Street.
A.B., 1896, Harvard.
Topics—Major, European History; Minors, English History from 1784 to 1885.

Kimball, Herbert Harvey.....N. H. .....Library, U. S. Weather Bureau.
B.S., 1884, N. H. C. A. and M. A.
M.S., 1900, Columbian University.
Topics—Major, Astro-Physics; Minors, Meteorology,, Practical Meteorology.

Ludlow, Clara Southmayd.....D. C. .....The Plaza.
B.S., 1900, M.S., 1901, A. and M. College, Miss.
Topics—Major, Preventive Medicine; Minors, Histology, Physiology; (Human) Anatomy, Bacteriology and Pathology.

Lyon, Marcus Ward, Jr.....N. J. .....National Museum.
Ph.B., 1897, Brown University.
M.S., 1900, M.D., 1902, Columbian University.
Topics—Major, Zoölogy; Minors, Neurology, Histology.

MacDonald, Donald Francis.....Wash. .....Geological Survey.
B.S., 1905, University of Washington State.
M.S., 1906, The George Washington University.
Topics—Major, Geology; Minors, Paleontology, Mineral Chemistry.

Maguire, Thomas Francis James..D. C. .....1736 U Street.
B.S., 1897, Massachusetts Institute of Technology.
Topics—Major, Physics; Minors, Advanced Dynamo Design, Electro-Chemistry.

Marsh, Millard Caleb.....N. Y. .....Bureau of Fisheries.
B.S., 1897, Cornell University.
M.S., 1905, The George Washington University.
Topics—Major, Analytical Methods; Minors, Bacteriology, Biochemistry.

Marshall, Elmer Eugene.....D. C. .....1327 Newton Street.
B.A., 1889, Ohio Wesleyan University.
S.T.B., 1904, Boston University.
Topics—Major, History; Minors, Philosophy, Biblical Literature.

Mattern, Louis Wilson.....Penn. .....McKinley School.
B.S., 1894, Pa. State College.
Topics—Major, Chemistry; Minors, Biochemistry, Physical Chemistry.

Name.	Legal residence.	City address.
Mills, Joseph Strayer	Md.	Central High School.

B.A., 1890; M.A., 1893, Western Maryland College.
Topics—Major, Chemistry; Minors, Mineralogy Physics.

Newberne, Robert Edward Lee	Texas	914 New York Avenue.

M.D., 1893, Georgetown University.
D.D.S., 1898, Tacoma College Dental Surgery.
B.S., 1901, M.S., 1901, Columbian University.
Topics—Major, Neurology; Minors, Anatomy, Physiology.

Newton, Elmer Slayton	Mass.	Rm. 64, The Brunswick.

B.A., 1895, Amherst.
M.D., 1905, The George Washington University.
Topics—Major, Organic Chemistry; Minors, Bacteriology, Bio-chemistry.

Norton, John Bitting Smith	Md.	College Park, Md.

B.A., 1896, M.S., 1899, Kansas State Agricultural College.
Topics—Major, Botany; Minors, Plant Chemistry, Chemistry.

Orth, Henry, Jr	D. C.	1011 L Street.

M.E., 1893, Lehigh.
M.S., 1899, Columbian University.
Topics—Major, Physical Chemistry; Minors, Organic Chemistry, Theoretical Chemistry.

Patrick, George Edward	Iowa	Dept. of Agriculture.

B.S., 1893, M.S., 1894, Cornell University.
Topics—Major, Agricultural Chemistry; Minors, Bacteriology, Bio-chemistry.

Peake, James Frederick	Va.	927 F Street, N. W.

B.A., 1902, Randolph Macon College.
M.A., 1904, Columbian University.
Topics—Major, American History; Minors, Latin, English.

Portner, Edward George	D. C.	Alexandria, Va.

B.S., 1897, M.S., 1898, Columbian University.
Topics—Major, Chemistry; Minors, Physical Chemistry, Mineral Chemistry.

Reynolds, John Merriam	Pa.	Cosmos Club.

M.A., 1905, Columbian University.
Topics—Major, Philosophy; Minors, Continental History, Political Philosophy.

Richards, Luther Adolph	Va.	1100 N. Y. Avenue.

B.A., 1902, M.A., 1903, M.S., 1904, Columbian University.
Topics—Major, Astronomy; Minors, History of Astronomy, Solar Physics.

Name. Legal residence. City address.

Richardson, Edward Elliott.....D. C. .....404 7th Street, S. W.
M.D., 1895, B.S., 1904, Columbian University.
M.S., 1905, The George Washington University.
Topics—Major, Philosophy; Minors, Neurology, Physiology, Experimental Psychology.

Simon, Abram .....D. C. .....2606 University Place.
Rabbi, 1894, Cincinnati Hebrew Union College.
B.L., 1894, Cincinnati University.
Topics—Major, Philosophy; Minors, English Literature, Biblical Literature.

Snelling, Walter Otheman.....Mass. .....3412 13th Street.
B.S. in Chem., 1904, Columbian University.
B.S., Gen. Sci., 1905, Harvard.
Topics—Major, Chemistry; Minors, Advanced Geology, Chemistry of the Rare Earths.

Solyom, Herbert Louis.....Md. .....U. S. Patent Office.
B.S., 1902, M.S., 1903, Columbian University.
Topics—Major, Astro-Physics; Minors, Economics, Meteorology.

Stiles, George Whitfield, Jr.....Okla. .....25½ Bates Street.
B.S., 1900, Oklahoma Agricultural and Mechanical College.
M.D., 1905, George Washington University.
Topics—Major, Bacteriology; Minors, Biochemistry, Practice of Medicine.

Stockberger, Warner W.....Ohio .....3628 10th Street.
B.S., 1902, Denison University.
Topics—Major, Botany; Minors, Botany, Zoölogy.

Swett, Otis Dow.....Md. .....Chevy Chase.
LL.B., 1891, LL.M., 1892, B.S., 1904, Columbian University.
Topics—Major, Chemistry; Minors, Electrochemistry, Stereochemistry.

Welsh John Cleveland.....Tenn. .....229 F Street, N. E.
B.S., 1887, Carson and Newman College.
M.S., 1902, Columbian University.
Topics—Major, Botany; Minors, Chemistry, Zoölogy.

Wilkinson, Benjamin George.....D. C. .....Takoma Park, D. C.
B.A., 1897, University of Michigan.
M.A., 1905, Union College.
Topics—Major, History; Minors, American History, English History.

Wilkinson, Oscar .....Miss. .....1404 L Street.
M.D., 1896, Tulane University.
Ph.B., 1902, University of Mississippi.
M.A., 1903, Columbian University.
Topics—Major, Physiological Optics; Minors, Therapeutics, Practice of Medicine.

Name.	Legal residence.	City address.
Witherspoon, Thomas Alfred	Tenn.	26 Iowa Circle.

1883, Graduated from U. S. Naval Academy.
LL.B., 1891, M.S., 1897, Columbian University.
Topics—Major, Physical Chemistry; Minors, Chemistry, Electricity.

COLUMBIAN COLLEGE.

MEN.

Bachelor of Arts.

Name.	Legal residence.	City address.
Allison, Joseph Foster	D. C.	547 Florida Ave.
Baer, David Alphonse	D. C.	3044 N Street.
Berry, James William	D. C.	14 3d Street, S. E.
Bogle, John Cowan	Ky.	The Wyoming.
Brannin, James Marvin	Va.	156 U Street.
Brookes, John Saint Clair, Jr.	D. C.	1525 Corcoran Street.
Brown, Robson De S.	Iowa	1346 Monroe Street.
Clark, Henry Culbertson	D. C.	Takoma Park.
Covell, David Ransom	D. C.	1122 G Street, S. E.
Cragin, Harry Seymour	D. C.	1013 L Street.
Crawford, Angus McDonald	Va.	Alexandria, Va.
De Lancy, Roi	Ohio	1226 12th Street.
Dew, Ray Ellsworth	Mo.	1723 Corcoran Street.
Draper, Henry W.	D. C.	1810 S Street.
Earl, Charles Merritt	Wisc.	Office of Indian Affairs.
Eaton, Ernest Risley	Australia	Y. M. C. A.
Field, John W.	D. C.	111 11th Street, S. E.
Fosselman, John Jones	Pa.	2901 14th Street.
Gates, Edward Percy	Ark.	3506 Center Street.
Hall, Mark Anthony	Iowa	706 The Sherman.
Johnson, Nelson Trusler	Okla.	Brookland, D. C.
Jones, Claude Carville	Md.	Mt. Ranier, Md.
Marye, Tench Tilghman	D. C.	1526 29th Street.
Miller, William Cammack	D. C.	Woodlawn, Cleveland Park, D. C.
Newhouser, Roy Lyman Joseph	Pa.	217 East Capitol Street.
Plass, Joseph	Germany	226 4th Street.
Powers, Edgar Cordell	Md.	Brightwood Park, D. C.
Rhee, Syngman	Corea	802 L Street.
Rives, John Joseph	N. C.	1533 10th Street.
Rowley, Clifford Alonzo	Kansas	1344 Kenyon Street.
Schoenfeld, Hans Fred'k Arthur	D. C.	1629 Newton Street.

Phar.D., The George Washington University.

Name.	Legal residence.	City address.
Schreiber, Ernst Otto, Jr.	D. C.	642 E. Street, N. E.
Shallenberger, Don	Ohio	1226 12th Street.
Singleton, Ogle Ridout	D. C.	2020 H Street.
Smith, Frank Newman	D. C.	519 The Ontario.
Spencer, Harry Garfield	D. C.	Congress Heights.
Stout, Joseph Duerson	D. C.	1104 8th Street.
Van Vleck, William Cabell	D. C.	800 E Street. N. E.
Wilhelm, Donald	Ohio	1831 G Street.

Bachelor of Science.

Barnett, Victor Hugo	Ind.	U. S. Geological Survey.
Bond, Eugene Webster	D. C.	Wash. Loan and Tr. Bg.
Brandenburg, Joseph Franklin	D. C.	915 French Street.
Curl, Joseph Ryland	D. C.	416 5th Street.
Dahn, Franz Friedrich Wilhelm	Minn.	1225 N Street.
Eigelberner, Jesse	Pa.	2026 G Street.
Hornaday, Frank Adelbert	Texas	232 Post Office Bldg.
Lamb, William Ers	D. C.	1322 I Street.
McCarthy, Charles Henry	R. I.	2155 L Street.
Marsh, Hadleigh	D. C.	3525 10th Street.
Mechlin, Ernest Frederick	D. C.	3020 Cambridge Place.
Miller, Alvin Wilson	D. C.	2914 N Street.
Molster, Ralph Robertson	D. C.	3308 9th Street, Brookland, D. C.
Moneyway, James Lewis	Ala.	Room 52, Busch Bldg.
Myers, Henry Bernard	D. C.	1412 Columbia Street.
Nichols, Charles Henry	Wash.	302 C Street.
Reavis, Andrew Bryant	Tenn.	3525 11th Street.
Repetti, William Charles	D. C.	404 Seward Square.
Seiler, Justin Frank	Ohio	123 12th Street, N. E.
Simms, Terry Boisseau	D. C.	1458 Clifton Street.
Sterrett, John Adlum	D. C.	Springland, Pierce Mill Road, D. C.
Stonebraker, Harold English	Pa.	645 Massachusetts Ave.
Thompson, Oscar	Wisc.	1829 G Street.
Wright, Clarence Aldro	D. C.	1829 Kalorama Ave.

Bachelor of Science in Chemistry.

Crowe, John Joseph	D. C.	Bladensburg Road, D. C.
Fuller, Aubrey Vail	D. C.	2318 1st Street.
McDermott, Frank Alexander	D. C.	45 U Street.
Marsh, Allen	Ohio	628 E Street, N. E.

Name.	Legal residence.	City address.
Meyer, Will Beck	D. C.	609 P Street.
Parker, Charles Edwin	D. C.	3153 Mt. Pleasant St.
Pohlmann, Joseph John	N. Y.	2917 Olive Ave.
Reed, Edward Oliver	D. C.	1216 S Street.
Sherwood, Sidney Forsythe	Va.	218 N. Patrick Street, Alexandria, Va.
Shrader, James Houston	D. C.	804 9th Street.
Smoot, Charles Calvert	Va.	Alexandria, Va.
Wilson, Clarence Paret	Md.	Bureau of Chemistry.

Bachelor of Science in Politics.

Allis, Frank Coy	N. Y.	814 M Street.

Special.

Anderson, Henry Melville	Ala.	2009 G Street.
Anderson, Howard M	Ohio	1531 New Hampshire Ave.
Arlitt, John Louis	Texas	2024 F Street.
Aylesworth, William Lot	Pa.	Care of Depot Quartermaster, U. S. A.
Beard, William Grant	Ind.	214 C Street.
Bieber, Isidor	D. C.	630 G Street, S. E.
Blankemeyer, Francis Xavier	D. C.	1205 Vermont Ave.
Block, Theodore	D. C.	155 11th Street, N. E.
Bowker, Charles Harvey M.D., 1892, Hahneman Medical College. M.D., 1900, National University.	N. H.	1349 L Street.
Bradley, Ernest Hazard	D. C.	1222 B Street, S. E.
Bradshaw, Paul	D. C.	901 C Street, N. E.
Brown, Robert Harlin	Oregon	1130 Park Place, N. E.
Bullough, George Van Ness	D. C.	113 Tennessee Av., N. E.
Campbell, Harry Hamilton	D. C.	1005 Otis Place.
Carter, James Roy	Mich.	1532 O Street.
Caywood, Charles Chester	D. C.	1436 Newton Street.
Chadwick, George Albert	N. J.	623 South Fairfax Street, Alexandria, Va.
Davis, Allan	Ohio	900 11th Street, S. E.
Domeratzky, Louis	N. Y.	Bureau of Manufactures.
Dwyer, Michael Thomas	Va.	603 South Washington Street, Alexandria, Va.
Ferree, Sheridan	D. C.	1720 13th Street.
Finch, Elmer Harrison	Mich.	537 21st Street.
Finch, Edmund Louis	D. C.	911 S Street.

Name.	Legal residence.	City address.
Fisher, Dwight Wilton	D. C.	1921 G Street.
Fisher, Francis Joseph	D. C.	1839 R Street.
Garrett, Clyde Davis	D. C.	945 O Street, N. W.
Hutchins, Wells Aleck	D. C.	1739 Q Street.
Ingersoll, Edwin Henry	D. C.	Bureau of Animal Industry.
Johnson, Hamilton Crabb	Calif.	The Ontario.
Leonard, Lewis Thompson	Pa.	525 F Street, N. E.
Locke, John Dexter	N. H.	The Normandie.
Lum, David Hurlbut	D. C.	128 S Street.
McConville, Arthur Hingeley	D. C.	1202 21st Street.
Murray, Fenwick H	Md.	Chevy Chase, Md.
Osgood, Whitman	Ill.	1402 14th Street.
Preston, Fred Alexander	Md.	Room 57, Busch Bldg.
Shoppell, Robert Washington	D. C.	The Kenesaw.
Shore, Howard James	N. C.	Bureau of Animal Industry.
Simons, Robert Stephenson	S. C.	1012 13th Street.
Sisco, Henry Nathaniel A.B., 1898, Battle Creek College.	D. C.	1602 Vermont Ave.
Stauffer, Henry Edgar	Del.	2407 M Street.
Stevens, Herbert Ainsworth	Mass.	904 12th Street.
Tibbets, Albert Perkins	N. H.	1018 14th Street.
Tong, Yu-Nin	China	Chinese Legation.
Vorkoeper, John	Wisc.	1921 G Street.
Waterman, Storrs S	D. C.	207 R Street.
Watters, William Henry	Ohio	1008 22d Street.
Whitfield, Joseph A	D. C.	1419 R Street.
Wilson, George Huston	D. C.	2331 1st Street.

Auditor.

Entzminger, James F	S. C.	935 K Street.

WOMEN.

Bachelor of Arts.

Name.	Legal residence.	City address.
Adams, Vera Elsie	D. C.	503 B Street, N. E.
Baker, Effie Kline	D. C.	1728 Columbia Road.
Barbour, Grace Evelyn	Mo.	1327 12th Street.
Bethune, Frances Gunby	Va.	The California.
Birch, Mary Simpson	Va.	Hammond Court.
Birtwell, Bertha	Pa.	15 8th Street, N. E.

Name.	Legal residence.	City address.
Bodmer, Annie Elizabeth	D. C.	1325 1st Street, S. W.
Burroughs, Elizabeth Harding	D. C.	515 7th Street, S. E.
Cabell, Clara Winston	Va.	Nat'l Cathedral School.
Capell, Isabel Rhoda	N. Y.	471 H Street.
Cash, Lilian Claire	D. C.	22 Tennessee Av., N. E.
Church, Christine Merrick	D. C.	626 North Carolina Ave., S. E.
Clift, Linda Lee	D. C.	1408 10th Street.
Cochran, Ruth Gilbert	Colo.	2464 Wisconsin Ave.
Conner, Lulu Elizabeth	D. C.	Station 47.
Cooke, May Thacher	Colo.	1328 12th Street.
Corson, Edna Lois	D. C.	1154 17th Street.
Craig, Marion Edith	Va.	2020 15th Street.
Crawford, Mary Page	Va.	2026 North Capitol St.
Essick, Blanche Lillian	D. C.	105 Kentucky Ave., S. E.
Ettenger, Anne Lee	Ind.	1507 Lamont Street.
Evans, Helen Marie	D. C.	1348 Euclid Street.
Farrington, Charlotte Raynsford	Minn.	3014 Dent Place.
Field, Ruth Genevieve	Wisc.	111 11th Street, S. E.
Haslup, Alice Elma	Md.	205 9th Street, S. W.
Hurley, Mary Louise	Md.	Rockville, Md.
Lockwood, Vesta Janet	D. C.	21 7th Street, S. E.
McAvoy, Catherine Agatha	D. C.	1917 17th Street.
McCoy, Louise Winifred	D. C.	328 E Street, N. E.
MacMullen, Edgarda Marion	Pa.	107 2d Street, N. E.
Mahan, Jane	W. Va.	1900 Lamont Street.
Merritt, Pearl Ketcham	Minn.	154 F Street, S. E.
Moyer, Jennie	D. C.	610 8th Street, N. E.
Newton, Margaret	D. C.	1625 R Street.
Pearce, Anna Elizabeth	D. C.	1425 35th Street.
Person, Ellen Bertha	S. D.	3030 Q Street.
Ridout, Edith Hieskell	D. C.	1517 Corcoran Street.
Ronald, Ethel Marion	D. C.	1601 15th Street.
Salsbury, Annis	Va.	1318 Massachusetts Ave.
Scott, Mabel Lavinia	D. C.	1455 Girard Street.
Sebree, Jessie Lydia	D. C.	Ammendale, Md.
Stansbury Blanche Gertrude	Va.	207 N. Columbus Street, Alexandria, Va.
Swartwout, Jessamine Eliza	D. C.	12 Iowa Circle.
White, Emilie Margaret	Vt.	2568 University Place.
Wilson, Ruth	D. C.	214 P Street.
Zoelzer, Ella	Ill.	Division D, Patent Office.

Bachelor of Science.

Name.	Legal residence.	City address.
Alden, Levietta Ruth	D. C.	809 L Street.
Alexander, Florence B	D. C.	1845 North Capitol St.
Allen, Nila Frances	Ind.	1303 N Street.
Besselievre, Nellie Ecker	Pa.	315 E Street, N. E.
Brackett, Corinne Elizabeth	D. C.	1464 Girard Street.
Cochran, Mildred Winans	D. C.	2464 Wisconsin Ave.
Field, Eva Cornelia	Wisc.	111 11th Street, S. E.
Hathaway, Lillie Theresa	Ohio	Division of Appointments.
Johnson, Clara Elizabeth	Ind.	1723 G Street.
Johnston, Mildred Floyd	D. C.	1762 N Street.
Macmillan, Julia Theckla	D. C.	600 Maryland Ave., N. E.
Pfrimmer, Mabel	Ind.	1207 1st Street.
Raber, Katherine May	Ohio	1326 Park Road.
Saunders, Marie Katherine	Okla.	The Brunswick.
Shackelford, Laura	D. C.	924 Maryland Ave., N. E.
Steever, Laura Winfield	Md.	Forest Service.
Taylor, Margaret Randolph	D. C.	1330 U Street.
Van Doren, Emma May	D. C.	629 Massachusetts Ave.

Bachelor of Science in Chemistry.

Hildreth, E. Theolian	Ala.	1825 Oregon Ave.

Bachelor of Science in Politics.

Prescott, Ollie Josephine	Ill.	1219 Massachusetts Ave.

Special.

Allen, Jessie M	Kansas	1313 Q Street.
Austin, Ella Morgan	W. Va.	1208 M Street.
Balloch, Agnes McGrew	D. C.	1013 15th Street.
Block, Lydia Hortense	D. C.	Library of Congress.
Bryson, Laura Elizabeth	Pa.	714 12th Street, N. E.
Denham, Ruth Millicent	D. C.	Manor House.
Dufour, Arline Hughes	D. C.	1343 L Street.
Edwards, Rowena Adeline	Iowa	Weather Bureau.
Harnden, Mabel Blanche	Mich.	610 8th Street, N. E.
Harper, Minnie	D. C.	619 G Street, S. W.
Hauser, Edna	D. C.	1729 1st Street.
Johnston, Margaret Anne	D. C.	1633 Irving Street.
King, Winifred Mary	D. C.	1803 14th Street.
MacLeod, Helen Mar	D. C.	1347 Girard Street.
Moore, Eglantine Lee	D. C.	1308 Wallach Place.

Name.	Legal residence.	City address.
Morrisroe, Anna	Ind.	718 19th Street.
Moskedal, Lillian Belle	Okla.	215 5th Street, N. E.
Olmsted, Elizabeth	D. C.	816 B Street, N. E.
Page, Marian G.	D. C.	2001 R Street.
Peet, Elizabeth	N. Y.	Kendall Green.
Sioussat, Marie Theresa	D. C.	1801 13th Street.
Smith, Ethel Marion	Ill.	1623 Park Road.
Smith, Florence Patterson	Ill.	1623 Park Road.
Smith, Marian	D. C.	1650 Newton Street.
Solyom, Stella May	Mo.	3028 15th Street.
Stein, Hilda Beatrice	D. C.	The Denver.

WASHINGTON COLLEGE OF ENGINEERING.

Bachelor of Science in Civil Engineering.

Name.	Legal residence.	City address.
Adams, Raymond Edmond A.B., 1891, C. H. S., Philadelphia, Pa.	Pa.	2118 G Street, N. W.
Bacon, James Everett	Nebr.	1831 G Street.
Barnum, William Horatio	N. Y.	1831 G Street.
Brooks, Walter John	Pa.	57 U Street, N. W.
Burchard, Edwin Day	D. C.	1530 10th Street, N. W.
Croxton, Roland Albert	D. C.	1332 T Street.
Curran, William Joseph Francis	Va.	305 1st Street, S. E.
Curtis, James Eugene	N. Y.	1011 K Street.
Daniels, Richard Duvall	D. C.	1133 Newton Street, Brookland, D. C.
Davidson, William Falconer	N. C.	1226 Evarts Street, N. E.
Davis, Raymond Tilton	Md.	509 3d Street.
Dodson, James Dunbar	D. C.	1714 F Street.
Donk, Marion Gilbert	Fla.	Y. M. C. A.
Dougherty, Howard Francis	Md.	1012 12th Street.
Dwyer, John Rochford	D. C.	628 F Street, S. W.
Dyson, Arnold Horton	R. I.	1919 35th Street.
Fenton, John Wyckoff	D. C.	1508 9th Street.
Garvin, Edgerton Chester	Ohio	G. W. U.
Gillespie, Franklin Stuart	Pa.	34 8th Street, N. E.
Harrington, George Leavitt	Minn.	916 C Street, S. E.
Hartley, Harry Carter	Ill.	1414 11th Street.
Hill, Hugh Stewart	Wyo.	815 11th Street, N. E.
Himelfarb, Abraham, Jr.	Md.	1024 1st Street, S. E.
Hoffman, Edwin S.	Pa.	523 B Street, N. E.
Hough, Roland P.	Va.	3301 Prospect Ave.
Howland, Charles Alpha	D. C.	1429 Belmont St.
Hursey, John Stealey	D. C.	1815 U Street.

Name.	Legal residence.	City address.
King, Edwin Houptman	D. C.	1321 M Street.
Lawrence, Glenn Rupert	D. C.	3425 14th Street, Brookland, D. C.
McInturff, Carleton	Va.	The Melton.
McPike, Martin John	Penn.	812 1st Street.
Magruder, Marshall	D. C.	1831 S Street.
Manville, Loren Robert	S. D.	The Sherman.
Mindeleff, Victor, Jr	D. C.	1042 29th Street.
Molitor, David Albert	Wisc.	827 Mills Bldg.
Moody, Theodore Lyman	Md.	1512 P Street.
Nichols, Charles Henry	Wash.	302 C Street.
Padgett, Harold Dement	Md.	U. S. Geological Survey.
Petersen, George Henry	D. C.	1647 Columbia Road.
Potter, Charles Hollister	N. C.	50 V Street.
Rockwell, Horace Lewis	D. C.	31 S Street.
Rodgers, William Joyce	D. C.	932 C Street, S. W.
Rouzer, Horace Dodge	Md.	753 E Street, S. E.
Saum, Irving Randolph	D. C.	1308 Girard Street.
Senior, Thomas Richard	D. C.	203 Elm Street.
Simpson, John Bogley	D. C.	925 E Street, N. E.
Smith, Harry Locke	N. H.	313 S Street, N. E.
Stuwe, John Daniel	Minn.	1017 P Street.
Topham, James Scott	D. C.	43 U Street, N. W.
Turkenton, William James	D. C.	1513 33d Street.
Walters, Henry Neal	Va.	Langley, Va.
Wanner, Howard Paul	Pa.	Hotel Stratford.
Warren, Frank Eugene	Md.	1218 9th Street.
Waters, Joseph Henry	D. C.	3227 11th Street.
Whiting, Julian Wythe	Md.	Rockville, Md.
Whiting, Louis Wine	Md.	Hyattsville, Md.
Yates, Robert Raleigh	D. C.	1608 6th Street.

Bachelor of Science in Electrical Engineering.

Bean, George Tinny	D. C.	312 Randolph Pl., N. E.
Blanco, Enrique Tomas	P. R.	919 G Street.
Bond, Rolf Wallace	D. C.	3127 Newark Street, Cleveland Pk., D. C.
Butts, Lorenzo Gould	Va.	National Electric Signalling Co.
Call, Loren Heinlein	D. C.	1448 Newton Street.
Church, Clarence Clinton	D. C.	626 North Carolina Ave.
Daniels, Ara Marcus, Jr	D. C.	The Portner.
Easterday, George Winship	D. C.	1681 31st Street.
Eigelberner, Jesse	Pa.	2026 G Street.

Name.	Legal residence.	City address.
Engle, Walter Morse	N. D.	1713 G Street.
Fehr, J. Ralph	Ill.	Bureau of Standards.
Fleming, Robert Fleming	D. C.	1847 Wyoming Ave.
Freeman, Louis George	D. C.	1700 Columbia Road.
Fuchs, Henry	Mo.	912 23d Street.
Gordon, Hayner Haskell	Ohio	1310 Girard Street.
Gourley, George Frederick	Md.	U. S. Pension Agency.
Gunning, James McIntosh	N. J.	122 East Capitol Street.
Gwinn, Thomas R	D. C.	1216 Connecticut Ave.
Honn, Harlan Verne	D. C.	1118 12th Street, N. E.
Johnson, Arthur Edward	Conn.	State, War, and Navy Building.
Law, Joseph Edward	D. C.	1627 14th Street.
Le Duc, Henry Sumner	D. C.	817 Varnum Street.
Magers, James Ellsworth	Ill.	812½ 11th Street, N. E.
Nickel, William Frederick	Md.	382 Patent Office.
O'Connell, Martin Joseph	Pa.	2126 1st Street.
Parry, William	Pa.	1919 G Street.
Parsons, John	Ky.	Dept. Commerce and Labor.
Pierce, James Francis	Mich.	1243 5th Street.
Plass, Joseph	Germany	226 4th Street.
Richard, Vernon Irving	D. C.	309 B Street, N. E.
Rose, Karl	S. D.	1327 Monroe Street, Brookland, D. C.
Scott, Oliver Hazard Perry	S. C.	3207 11th Street.
Stabler, Harold Brooke	Md.	The Regina.
Sterrett, John Adlum	D. C.	Springland, Pierce Mill Road, D. C.
Turnburke, Vernon Palmer	D. C.	403 P Street.
Uhler, Alfred Griffith	Va.	Alexandria, Va.
Veihmeyer, Frank	D. C.	438 10th Street, S. W.
Ward, Philip Henry, Jr	D. C.	1756 Pa. Ave.
Webster, George Gerald	D. C.	5405 7th Street.
Wenderoth, Ernest Ferdinand	N. Y.	Bureau of Standards.

Bachelor of Science in Mechanical Engineering.

Acker, Kemp Gerard	D. C.	913 16th Street.
Ball, Eugene Maurice	D. C.	3020 Dent Place.
Burrell, William Webster	Pa.	417 Massachusetts Ave.
Carty, Roy Franklin	D. C.	Bureau of Standards.
Clothier, Albert Lea	Ky.	2002 G Street.
Espe, Theodore Nikolá	Iowa	Y. M. C. A.
Gary, Howland R	Va.	Ordnance Drafting Rm., Navy Yard.

Name.	Legal residence.	City address.
Gibson, Harry C.	Pa.	Bureau of Standards.
Hough, Edgar Joseph	D. C.	472 Maryl'd Ave., S. W.
Jenkins, Oliver Lloyd	Ind.	413 A Street, S. E.
Lorando, Stephen Thomas	D. C.	1518 31st Street.
Miller, Elton Willard	Calif.	1825 1st Street.
Munroe, Russell Barker	D. C.	1337 21st Street.
Pipes, Walter Logan	D. C.	916 T Street.
Poole, George	D. C.	903 E Street, S. E.
Schaaf, August H.	Md.	Bureau of Standards.
Stafford, Charles F.	N. Y.	122 East Capitol Street.
Watkins, Francis Benjamin	D. C.	1626 S Street, N. W.

Special.

Beadle, John Bookwalter	D. C.	305 B Street, S. E.
Boshard, John Albert	Utah	1338 H Street.
Brame, Arthur Hervey	D. C.	1317 10th Street.
Carpenter, Essex Porter	D. C.	1921 G Street.
Curtis, William Barnard	Md.	Lenox Street, Chevy Chase, Md.
DeRiemer, Arthur Hyde	Ill.	1461 Chapin Street.
Gallagher, George Domonic	D. C.	413 K Street, N. E.
Hardester, John Sylvester	D. C.	529 12th Street, S. E.
Hendley, Albert Julian	D. C.	The Plymouth.
Humphreys, John Thomas	D. C.	718 8th Street, N. E.
Kenyon, Archie G.	Pa.	611 22d Street.
Kirkland, Thornton Crowns	Mexico	3615 Newark Street, Cleveland Pk., D. C.
Kramer, Frank Henry	D. C.	815 3d Street, S. E.
Lasley, Dana McGuffey	D. C.	The Albemarle.
Lescallett, John Abram	Md.	Glendale, Md.
Licarione, Alexander	D. C.	417 12th Street, S. E.
Lindenkohl, Ludwig	Md.	26 Grant Place.
McConnell, Harry Raymond	Va.	438 Kentucky Ave., S. E.
Mattingly, Gentry Heard	D. C.	475 F Street, S. W.
Moore, Arthur Allston	Md.	427 Monroe Street, Anacostia, D. C.
Piper, Edgar Raymond	D. C.	The Plymouth.
Shannon, Thomas Louis	Pa.	U. S. S. Puritan.
Smith, Chester Harvey	D. C.	327 2d Street, N. E.
Stump, William Gilpin Harrison	D. C.	The Cumberland.
Sutton, Edward	D. C.	138 Massachusetts Ave., N. E.
Zirkle, Joseph Claiborne	Va.	1221 10th Street.

ARCHITECTURE.

Bachelor of Science in Architecture.

Name.	Legal residence.	City address.
Baker, Josephine Rose	Md.	Hyattsville, Md.
Daly, Aubrey Truitt	D. C.	1311 Rhode Island Ave.
Doyle, Burton Jarvis	D. C.	632 C Street, N. E.
Holmes, Osgood	D. C.	1444 Belmont Street.
Holzberg, Tonnis Julius	D. C.	3019 Dumbarton Ave.
Illman, Hubert Percy	Pa.	1528 10th Street.
Lombard, Charles Russell	Me.	503 Spruce Street.
McAuley, Hugh Nisbet	D. C.	530 21st Street.
Sullivan, Francis Paul	D. C.	1823 U Street.

A.B., 1904, Georgetown University.

Special.

Bachschmid, Ernst Christian	D. C.	310 B Street, N. E.
Berryman, George Rue	Va.	1311 Q Street.
Blasey, Joseph	D. C.	214 Arthur Place.
Buckingham, Nevell	D. C.	134 C Street, N. E.
Burnham, Brooke Browning	D. C.	103 C Street, S. E.
Childs, George Singleton	Md.	1825 I Street.
Dysland, Henry Theodore	Wisc.	320 Maryland Ave., N. E.
Emmert, Percival Dobbins	D. C.	1845 Wyoming Ave.
Galloway, Gerald F	England	The Olympia.
Garland, Alexander, Jr	Peru	Peruvian Legation.
Geare, Reginald Wickliffe	D. C.	1318 Columbia Road.
Greenberg, Louis	D. C.	612 N Street.
Holmes, Walter	Pa.	2417 18th Street.
Humphrey, Harry Baxter	Oregon	The Bachelor.
Jackson, Henry Edmond	Va.	2405 18th Street.
Jones, Philip Craig	D. C.	701 East Capitol Street.
Knowles, William Alexander	Md.	National Museum.
Koetz, Peter	Pa.	1303 U Street.
Langille, Louis E	D. C.	Takoma Park, D. C.
Lockie, Joseph Alexander	Me.	1601 O Street.
Merwin, Charles Merrill	N. J.	917 Westminster Street.
Ray, George Nicholas	D. C.	2323 1st Street.
Roberts, Thomas Kent	Md.	1901 2d Street.
Steward, Willard Moore	D. C.	2127 1st Street.
Thatcher, Marion	Mich.	1754 Q Street.
Wagner, Simon Peter	Md.	1330 13th Street.

TEACHERS COURSES.

Æsthetics.

Name.	Legal residence.	City address.
Gardner, Marian	D. C.	1215 Irving Street.
Heath, Louise	D. C.	617 Florida Ave.
Newhouser, Bertha G.	Pa.	217 East Capitol Street.
Turner, M. Elsie	D. C.	414 B Street, N. E.
Wallace, Sarah Agnes	D. C.	3021 Newark Street.
West, Sara A.	D. C.	3014 13th Street.
White, E. J.	D. C.	G. W. U.

Archæology.

Flannery, Mary Philomena	D. C.	1600 1st Street.
Lamborne, Sarah	D. C.	1510 S Street.
Raymond, Katherine Green	D. C.	1521 Vermont Ave.

Architecture.

Atlee, Anna May	D. C.	1322 S Street.
Burroughs, Lillian O.	N. J.	515 7th Street, S. E.
Chester, Lilly A.	D. C.	1330 12th Street.
Concklin, Alice Elizabeth	D. C.	513 11th Street.
Guillaume, Bertha	D. C.	1412 11th Street.
Hungerford, Frances	D. C.	The Ethelhurst.
North, Hilda	D. C.	2807 14th Street.
Richards, Ruth Bergman	D. C.	101 Massachusetts Ave., N. W.

Biblical Literature.

Bradshaw, May Pual	D. C.	901 C Street, N. E.
Carpenter, Lillian	D. C.	205 D Street, N. E.
Fernald, Julia P.	D. C.	206 6th Street, N. E.
Greene, Olive Wirt	D. C.	12 I Street, N. E.
Stewart, Mary	D. C.	2017 H Street.
North, Hilda	D. C.	2807 14th Street.

Botany 20.

Johnston, Margaret Anne	D. C.	1633 Irving Street.

Comparative Biology.

Bogan, Rose Mary	D. C.	606 Massachusetts Ave.
Gibbs, Kate Maria	Mass.	1216 S Street.
Greenwood, Mary Maud	Md.	1211 Montello Av., N. E.
Haslup, Alice Elma	D. C.	205 9th Street, S. W.

Name.	Legal residence.	City address.
Hilleary, Clara Louise	D. C.	3314 P Street.
Hilleary, Mary Beatrice	D. C.	3314 P Street.
Jacobs, Emma Suter	D. C.	1407 10th Street.
Lamson, Elizabeth H	D. C.	2439 18th Street.
Woodward, Esther R	D. C.	125 New York Ave.

Constitutional Law.

Beller, Lizzie Caroline	D. C.	235 1st Street, N. E.
Connell, Lillie Marie	D. C.	610 New Jersey Ave.
Cook, Florence M	D. C.	607 Howard Place.
Dilger, Mary A	Penn.	222 New Jersey Ave.
Higgins, Elizabeth A	D. C.	101 North Carolina Ave., S. E.
Jayne, Mattie Filer	Va.	1322 W Street.
Lowe, Henry Francis	D. C.	215 5th Street, N. E.
Monahan, Margaret Florence	D. C.	101 North Carolina Ave., S. E.
Rowe, Effie F	D. C.	136 C Street, S. E.
Westcott, Edith C	D. C.	1317 Riggs Place.
Young, Irene O	D. C.	904 New York Ave.

English.

Burden, Edith	D. C.	1309 Riggs Street.
Burden, Katherine	D. C.	1309 Riggs Street.
Doing, Jennie E	D. C.	2036 F Street.
Alden, A. Grace	D. C.	809 L Street.
Fant, Jessie Du Bois	D. C.	321 A Street, S. E.
Fitzgerald, Louise	D. C.	1804 S Street.
Galiher, Blanche P	D. C.	436 6th Street, N. E.
Haslup, Alice Elma	D. C.	205 9th Street, S. W.
Heath, Louise	D. C.	617 Florida Ave.
Howell, Blanche Braxton	D. C.	724 10th Street, N. E.
Maloney, Amma J	Ill.	1902 Vermont Ave.
Marshall, E. Blanche	Md.	635 East Capitol Street.
Meyers, Minnie Matilda	D. C.	1319 Irving Street.
Smith, Janie Alice	D. C.	637 Massachusetts Ave., N. E.
Tennyson, J. Anna	D. C.	224 8th Street.
Underwood, Harriet	N. Y.	3223 N Street.
Van Doren, Emma May	D. C.	629 Massachusetts Ave., N. E.
Walker, Alberta	D. C.	1133 24th Street.
Wanstall, Laskey Mary	D. C.	

Geology.

Name.	Legal residence.	City address.
Breen, Mary Cecelia	D. C.	1357 U Street.
Sipe, Susan Bender	D. C.	The Ontario.
Whitney, Cornelia	D. C.	47 D Street, S. E.

History.

Barnard, Caroline Fanning	D. C.	2012 1st Street.
Bentley, Loleta A	D. C.	1317 Riggs Street.
Blandford, Nannie	D. C.	200 8th Street, S. W.
Church, Grace E	D. C.	626 North Carolina Ave., S. E.
Coale, Christine	D. C.	667 South Carolina Ave., S. E.
Dillon, Agnes B	D. C.	Cleveland Park.
Freeman, Alice Lavinia	D. C.	734 5th Street.
Green, Elsie Eugenia	D. C.	600 23d Street.
Lasier, Harriet C	D. C.	1427 Girard Street.
Mason, Josephine Dwight	Mass.	132 A Street, N. E.
Robey, Mabel Alida	Md.	Hyattsville, Md.
Sisson, Abbie Mills	D. C.	1804 1st Street.
Smith, Clara Louise	D. C.	327 2d Street, N. E.
Walsh, Helen I	D. C.	The Mt. Pleasant.
Sliney, R. L	D. C.	1428 Clifton Street.

Sociology.

Campbell, Ida May	D. C.	1918 13th Street.
Clark, Mary Stiles	Md.	R. F. D., No. 3, Silver Springs, Md.
Draper, Henry White	D. C.	1810 S Street.
Golden, Ellen	D. C.	The Portner.
Little, Agnes Inch	D. C.	332 Maryl'd Ave., N. E.
Littlejohn, Alice	D. C.	308 F Street.
Lockwood, Jane Girvan	Va.	1st & B Streets, S. W.
Macgee, Lottie Pell	D. C.	2211 I Street.
Newhouser, Enola H	Penn.	127 East Capitol Street.
Orr, Clem. Winnie	D. C.	1109 Spring Street.
Simons, Sarah Emma	D. C.	1420 N Street.
Thönssen, Ruby Ella	D. C.	315 C Street, S. E.
Tompkins, Lida R	D. C.	1881 3d Street.
Weddell, Mary	Va.	915 M Street.
Westcott, Edith C	D. C.	1317 Riggs Place.
Young, Irene O	D. C.	904 New York Ave.

Summary.

GRADUATE STUDIES:

Candidates for the M.A. degree	11	
Candidates for the M.S. degree	9	
Candidates for the Ph.D. degree	45	
In attendance	9	
		74

COLUMBIAN COLLEGE:

Candidates for the B.A. degree	85	
Candidates for the B.S. degree	42	
Candidates for the B.S. in Politics degree	2	
Candidates for the B.S. in Chemistry degree	13	
Special	75	
Auditor	1	
		218

WASHINGTON COLLEGE OF ENGINEERING:

Candidates for the B.S. in C.E. degree	57	
Candidates for the B.S. in E.E. degree	40	
Candidates for the B.S. in M.E. degree	18	
Special	26	
		141

ARCHITECTURE:

Candidates for the B.S. in Architecture degree	9	
Special	26	
		35

TEACHERS' COURSES:

Æsthetics	7	
Archæology	3	
Architecture	8	
Biblical Literature	6	
Botany 20	1	
Comparative Biology	9	
Constitutional Law	11	
English	19	
Geology	3	
History	15	
Sociology	16	
		98
Total		566

FACULTY OF MEDICINE.

DEPARTMENT OF MEDICINE.

Doctor of Medicine.

First Year.

Name.	Legal residence.	City address.
Amoss, Harold Lindsay	Ky.	5 Iowa Circle.
B.S., 1905, Kentucky State College.		
Chartters, George Chancellor	Va.	1335 H Street.
Derrick, Willie Smelzer	Miss.	811 Vermont Ave.
Downey, Alice Winans	D. C.	2473 18th Street.
Davis, George Pullinger	D. C.	1307 9th Street.
Duenner, Robert Henry	Tenn.	815 12th Street.
Dulaney, Fred	Tenn.	G. W. U.
Elliott, Leo Louis	N. Y.	1317 8th Street.
Fearing, Henry Martin	N. C.	1412 I Street.
Fetzer, Lewis William	N. Y.	1550 3d Street.
Grad. Chem., 1900, Cooper Institute, N. Y.		
French, Frank Vernon	Idaho	210 A Street, S. E.
Gibson, John Latimon	D. C.	607 6th Street.
Goss, Audrey	Kansas	Gov. Hospital for Insane.
A.B., 1902, Kansas University.		
Herring, Katherine Mary	Iowa	The Savoy.
Hoover, George William	Okla.	1472 Clifton Street.
M.S., 1906, The George Washington University.		
Hornaday, Frank Adelbert	Texas	232, P. O. Building.
Huntington, William Henry	D. C.	2330 Massachusetts Ave.
Jewell, Benson Mundy	Ill.	716 19th Street.
Kemeys, William	D. C.	1633 29th Street.
Kisseleff, John	D. C.	1030 North Capitol St.
Lewis, Harry Samuel	D. C.	54 I Street.
Loop, Floyd Addison	Pa.	1529 10th Street.
McLoone, John Joseph	Pa.	717 H Street.
A.B., 1905, Catholic University.		
Phar.D., 1904, National College of Pharmacy.		
McMillan, Walter Alexis	S. C.	1220 I Street.
Medley, Thomas Charles	La.	1109 13th Street.
Middleton, Rankin York	D. C.	22 Seaton Street, N. E.
Morian, Clarence Herbert	Pa.	914 12th Street.
Nelson, Nesmith	Minn.	Auditor for P. O. Dept.
Norris, James Walter	Md.	514 3d Street.
Neville, James Alan	Nebr.	1829 G Street.
Paige, Wendell Arthur Heath	Vt.	1602 Vermont Ave.
Peyton, Harry Alexander	Pa.	1744 Riggs Place.

Name.	Legal residence.	City address.
Price, Walter	D. C.	438 New Jersey Ave., S. E.
Ross, Erwin Worth	N. C.	1516 K Street.
Rougeou, Charles F.	La.	515 F Street.
Ryan, Fred Nadenbousch	D. C.	1301 Corcoran Street.
Scanlon, Franklin Taylor	W. Va.	1903 G Street.
B.L., 1904, University of Nashville.		
Sharp, George Tarplit	D. C.	Cleveland Park, D. C.
Silberstrom, Paul	Russia	3d and H Streets, S. E.
Sinclair, Leith Llewellyn	Va.	327 M Street, S. E.
Sorrell, Clarence Holden	D. C.	244 8th Street, S. E.
Tibbets, Albert Perkins	N. H.	1018 14th Street.
Titus, Elijah White	Va.	1219 Otis Place.
Phar.D., 1906, The George Washington University.		
Vierra, George Washington	Hawaii	716 19th Street.
Waller, Clifford E.	D. C.	R. F. D., No. 3, Benning, D. C.
White, Lyle Charles	Ohio	1211 North Capitol St.
Wolfram, Philip Herman	Ill.	1137 12th Street.
Young, Clifton Eugene	D. C.	2509 Wisconsin Ave.

Second Year.

Anderson, Paul	Ill.	716 19th Street.
Asbell, Mellege Shaw	S. C.	1322 Rhode Island Ave.
A.B., 1901, Wofford College, S. C.		
Bales, Ernest Norment	Calif.	Washington Asylum Hospital.
Ph.G., 1903, Ohio Institute of Pharmacy.		
Brooks, James Joseph Lester	Pa.	465 Florida Ave.
Chappell, Sidney Lovett	D. C.	Tenleytown, D. C.
Clark, Albert Patton	D. C.	1217 Harvard Street.
Phar.D., 1905, National College of Pharmacy.		
Collins, James Cleveland	Va.	1142 6th Street.
Conklin, Rush West	Pa.	Government Printing Office.
Craft, Clarence Christian	S. C.	1116 10th St.
B.S., 1902, S. C. Military Academy.		
Dunn, Abner Beebe	Pa.	1335 H Street.
Eldridge, Watson William, Jr.	Md.	316 Maryland Ave., N. E.
Fair, Charles Hardy	Va.	732 21st Street.
French, Sanford Williams	N. Y.	U. S. S. Puritan.
Frey, John Paul	D. C.	1224 30th Street.
Glennan, Kenneth Rayner	Md.	Chevy Chase, Md.

Name.	Legal residence.	City address.
Gochenour, David Thomas	Va.	28 R Street.
Bach. Eng, Bridgewater College.		
Griffin, Clarence Herbert	Mass.	1337 Columbia Road.
B.S., 1904, Massachusetts Agricultural College.		
Hoey, John Joseph	R. I.	1825 H Street.
Jobson, William Russell	Pa.	Y. M. C. A., Room 440.
Kavanagh, James Edward	Mass.	1431 Q Street.
Keneipp, Edgar Percy	Ill.	136 D Street, S. E.
Kinner, Jesse Lee	N. Y.	1317 8th Street.
Klugh, George Fred	S. C.	Bureau of Plant Industry.
B.S., 1901, Clemson Agricultural College.		
Lind, John Edward	D. C.	1355 Maryland Ave., N. E.
McEnery, Douglas Wiltz	La.	1412 I Street.
B.A., 1903, Tulane University.		
McKnight, Frederick W	Ohio.	1314 11th Street.
McLaughlin, William Frank	Pa.	Emergency Hospital.
Mann, Victor Llewellyn	Mich.	2 Iowa Circle.
Micheloni, Louis Antony	Uruguay	1220 G Street.
Morris, Horace	Ky.	1411 Corcoran Street.
Nelson, Cyrus William	Okla.	Indiana Ave. and 1st St., N. W.
B.S. in Chem., 1903, Oklahoma Agricultural and Mechanical College.		
Phar.D., 1906, National College of Pharmacy.		
Orrison, Lloyd Foster	Va.	Mount Vernon Flats.
Pole, Samuel Boyce Pole, Jr	D. C.	216 8th Street, N. E.
Powell, Robert Llewellyn	Va.	934 O Street, N. W.
Rhees, Benjamin Rush	D. C.	1853 Ontario Place.
Rock, George Roscoe	N. J.	The Seward.
Russell, Riley	Ill.	2 Iowa Circle.
Simonton, Lawrence Joseph	Ind.	1451 Rhode Island Ave.
Sisco, Henry Nathaniel	D. C.	1602 Vermont Ave.
A.B., 1898, Battle Creek College.		
Sorensen, Antone Christian	Utah	1130 12th Street.
Teeter, Frank Irvin	Mo.	617 H Street.
Vasenius, Fredrick Walter	Finland	2 Iowa Circle.
Weiler, George Leo	Utah	814 B Street, N. E.
Willis, Harry Clay	N. C.	932 K Street.
Willis, John Mitchell	W. Va.	1110 New York Ave.
Wood, William Pleasant	Ohio	231 7th Street, N. E.

Third Year.

Name.	Legal residence.	City address.
Avery, Frederick Scott	Mich.	1460 Corcoran Street.
Bowers, John Edson	Ind.	23 C Street, N. E.
Brown, Frank J	Iowa	49 T Street.
Browning, Andrew Johnson	Md.	Y. M. C. A.
Bryan, William Alvin	Iowa	U. S. Capitol.
Dunmire, Roy Franklin	Penn.	133 10th Street, N. E.
Everett, Ernest D.	Mo.	23 Q Street, N. E.
A.B., 1899, Baker University		
Frazier, Frank Eugene	Wis.	3012 11th Street.
Garnett, Algernon Sydney	Va.	Sibley Hospital.
Gehringer, George Matthew	Penn.	1121 15th Street.
Griffith, Thomas Everett	Penn.	718 4th Street, S. E.
Hart, George H.	Penn.	1516 K Street.
V.M.D., 1903, University of Pennsylvania.		
Higgins, Daniel W., Jr.	Md.	146 11th Street.
Hopkins, John Wilson	Minn.	1335 H Street.
Horgan, Edmund Joseph	D. C.	1167 19th Street.
Irbysmith, William Marion	Ky.	1111 17th Street.
A.B., 1901, A.M., 1901, Georgetown College, Ky.		
Lawrence, Charles Solomon	N. C.	Columbia Hospital.
Littlefield, John Ramsey	D. C.	Emergency Hospital.
MacKnight, Robert Stanley	Mich.	5508 Wisconsin Ave.
Maxwell, Maurice Hopkins	Md.	Sibley Hospital.
McLean, Frank	D. C.	735 13th Street.
Meyer, Henry Adolph	Pa.	212 8th Street, S. E.
Molzahn, Herman E.	Minn.	1017 P Street.
Neate, John Sweyn	D. C.	3009 Dumbarton Ave.
Noyes, Edward Rogers	D. C.	1014 S. C. Ave., S. E.
Ong, Harry Alfred	Ohio	917 S Street.
Patterson, Orra Edgar	Ill.	1012 17th Street.
Pyne, Herbert Samuel	Utah	915 M Street.
Quick, Ralph Andre	Va.	University Hospital.
Sherwood, John Wesley	Md.	156 11th Street, N. E.
Simons, Harry Emmerich	D. C.	212 A Street, S. E.
Smith, Ernest Wellington	W. Va.	1825 F Street.
Tayloe, Harry Marbury	Va.	1111 17th Street.
Taylor, Edward	Ala.	1013 P Street.
B.S., 1903, in Pharmacy, Alabama Polytechnic Institute.		
Tewksbury, William Davis	Colo.	Barne's Hospital.
Thompson, Lewis Royer	Penn.	801 New Jersey Ave.
B.A., 1900, Ursinus College.		

Name.	Legal residence.	City address.
Turnbull, Samuel Jay	Fla.	1103 H Street.
Weber, Frederick Clarence B.S., Ohio State University.	Ohio	121 Md. Ave., N. E.
Weidemann, Clarence Conrad	D. C.	1237 Girard Street.
Weithas, Richard C	N. Y.	General Land Office.
Wheatley, Charles	Md.	Bethesda, Md.
Wheeler, Arthur Joseph	Ill.	119 E Street, S. E.
Wilhelm, Joseph	Ill.	Room 362, Navy Dept.
Williams, Richard Theodore	D. C.	1319 8th Street.
Wolfe, James Thruston	Va.	815 15th Street.
Wolfe, Rowland Daniel	Md.	1335 H Street.

Fourth Year.

Barnesby, Walter Raleigh	Ill.	The Brunswick.
Beistel, Matthew John	Mich.	708 Massachusetts Ave., N. E.
Biggs, Joseph Rozier	D. C.	1809 Riggs Place.
Bogan, Joseph Borrows	D. C.	606 Massachusetts Ave.
Bower, Charles Franklin	S. D.	Y. M. C. A.
Boyd, William Alexander	N. C.	The Plymouth.
Bryson, Herbert James A.B., 1903, Columbian University.	Pa.	714 12th Street, N. E.
Burket, Clare William	Pa.	1519 Kingman Place.
Carr, William Brown, Jr	D. C.	1418 L Street.
Carter, Paul Irving	Calif.	1418 L Street.
Chapman, John Madison	Md.	Department of Justice.
Chipman, Cline N	Ky.	The Plaza.
Clark, Roy Manning	Mich.	1231 11th Street.
Cliff, Benjamin F	N. C.	1400 L Street.
Compton, Arthur George	D. C.	Children's Hospital.
Conklin, Coursen Baxter	D. C.	University Hospital.
Coster, Leonard Martin	D. C.	813 East Capitol Street.
Cuthbertson, Charles Wesley D.D.S., 1900, Columbia University.	D. C.	309 7th Street.
Darnall, Moses Hubbard	Texas	1618 15th Street.
Dewey, Christian Henry Master of Accts., 1904, Western Normal College.	Ill.	32 Seaton Street.
Dollman, Clarence Mazarine	Va.	1000 N Street.
Emery, James Armitage	Md.	60, The Olympia.
Garton, Alfred Clark	Ind.	Dept. of Agriculture.
Grant, Charles Vincent	Pa.	The Coywood.
Grant, John Lee	Va.	1234 Duncan Street, N. E.
Hailman, Hubert Victor	Va.	301 C Street.

Name.	Legal residence.	City address.
Hankemeyer, Nathaniel William.	Mass.	1223 N Street.
A.B., 1885, Iowa Wesleyan.		
B.D., 1890, Chicago Theological Seminary.		
Harrison, Charles Alben	Ill.	1335 H Street.
Hart, John White	Mass.	220 4th Street, S. E.
Hartley, Clarence A	Ind.	607 4th Street.
Haywood, John Kerfoot	N. Y.	Dept. of Agriculture.
B.S., 1896, Cornell University.		
Hoberman, Samuel	N. J.	1105 K Street.
Holmes, Robert Ward	N. H.	215 Florida Ave.
Howlett, Howard Henry	La.	1313 Wallach Place.
Johnston, Henry Vernon	D. C.	University Hospital.
Kearney, Henry Walper	Va.	1530 O Street.
Kelleher, Jeremiah Edward	Mass.	930 I Street.
Kline, Lane Bruce	Va.	803 8th Street.
Lamkin, Joseph Bayard	Ga.	216 New York Ave.
Lee, Thomas Alexander, Jr	D. C.	1755 Church Street.
Levy, William Victor	N. J.	8 B Street, N. E.
McConnell, James Henry	N. Y.	314 N. C. Ave., S. E.
McKee, Charles Bradford	Calif.	Y. M. C. A.
Mess, William Adam	Ind.	Garfield Memorial Hospital.
Monk, Frederick Hinton	N. Y.	1109 14th Street.
Morris, Roy Thomas	D. C.	1209 O Street.
Moser, William Calvert	Pa.	1221 New York Ave.
Nielson, Alexander J	Utah	512 B Street, N. E.
Phillips, Orlyn Sargent	Nebr.	73 Seaton Street.
Rector, Frank Leslie	Okla.	132 A Street, N. E.
B.S., 1902, Agricultural and Mechanical College, Oklahoma.		
Ryan, Bernard St. Elmo	Va.	1301 Corcoran Street.
Sacks, Samuel	D. C.	Children's Hospital.
Schapiro, Louis	Wisc.	1205 11th Street.
Smith, Joseph Allen	N. D.	1931 K Street.
Smith, Thomas Francis	Fla.	1116 New York Ave.
Stephenson, Eugene Theodore	Texas	1124 E Street, N. E.
Stetson, Thomas	D. C.	Nat'l Safe Deposit Savings and Trust Co.
Stout, Henry Isaiah	D. C.	U. S. Jail.
Tastet, David Walker	D. C.	265 N Street.
Terry, Philip Roy	La.	706 11th Street.
Thomas, William Joshua Groot	D. C.	1541 9th Street.
Titus, Stanley Herbert	Wash.	The Plymouth.
Tomlin, Timothy Harrington	Mo.	1009 B Street, N. E.
van Casteel, Gerald	Md.	320 Bond Building.
LL.B., 1899, LL.M., 1900, Georgetown University.		
Wallace, Clifton Robert	Va.	413 Mills Building.

Name.	Legal residence.	City address.
Waring, John Brockenbrough Harvie	Va.	1830 Oregon Ave.
Warner, Harry J.	Ill.	2021 H Street.
B.S., 1901, University of Illinois.		
Warner, Willis Henry	Mich.	2 Iowa Circle.
Watson, Charles Lyman	D. C.	2024 G Street.
Whamond, Frederick Gordon	Ill.	1234 Duncan St., N. E.
White, Eben Wesley	N. Y.	1504 Vermont Ave.
Wilcox, Horace Leroy	Pa.	2610 University Place.
Willets, David Gifford	N. J.	1530 O Street.
Ph.B., 1902, Wesleyan University.		
Wilson, Edward Comstock	N. Y.	1318 Park Road.
Yates, Robert Jackson	Va.	1300 Pennsylvania Ave.
L.I., 1894, William and Mary College.		

Special.

Dobson, William Hervie	China	118 11th Street, N. E.
M.D., 1895, Columbian University.		
Heiner, Robert Graham	D. C.	2119 O Street.
Owen, William Otway	D. C.	No. 1, Louisiana.
Prosperi, Augustus Grant	D. C.	The Newton.
Shaw, Harry Berry	D. C.	15 Maple Ave., Takoma Park, D. C.
Smith, Lucian Conway	Va.	801 Duke Street, Alexandria, Va.
M.D., 1905, The George Washington University.		

Review.

Browne, Rhodric Winfield	Mass.	1618 3d Street.
M.D., 1905, The George Washington University.		
Kebler, Lyman Frederic	Penn.	1322 Park Road.
Ph.C., 1890, M.S., 1892, University of Michigan.		
M.D., 1906, The George Washington University.		
Smith, Lucian Conway	Va.	801 Duke Street, Alexandria, Va.
M.D., 1905, The George Washington University.		
Trow, Walter Gordon	D. C.	912 East Capitol St.
M.D., 1905, The George Washington University.		

Summary.

CANDIDATES FOR THE M.D. DEGREE:

First year	48	
Second year	46	
Third year	46	
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DEPARTMENT OF DENTISTRY.

Doctor of Dental Surgery.

First Year.

Name.	Legal residence.	City address.
Barnhard, William Harry, Jr.	Ohio	1124 10th Street.
Bear, Ewing Marvin Wood	D. C.	914 New York Ave.
Cannon, Claude Quayle	Utah	915 L Street.
Goldberg, Max Samuel	D. C.	627 D Street.
Harrison, William Sloane	S. C.	2021 H Street.
Hickman, Charles Taylor	Pa.	Dewey Hotel.
Irby, Charles Rufus	Va.	1335 H Street.
Marsh, Bradford Cleveland	R. I.	1339 Irving Street.
Stellner, George Martin	Ill.	U. S. Naval Hospital.

Second Year.

Addison, William Richard	Wisc.	500 G Street, N. E.
Angelo, Guy Wilson	Va.	1236 13th Street.
Bernhard, James Walter	Pa.	423 2d Street.
Boarman, Alan Smith	Md.	807 H Street.
Britton, Emlyn J	Pa.	Washington Barracks.
Bumpus, Albert Horace	Mass.	1321 11th Street.
Clark, Robert Henry	Ind.	Naval Medical School Hospital.
Cummings, Alfred William	Kansas	413 P Street.
Fairfield, Thomas Leon	D. C.	1224 F Street.
Gash, Arthur Wellesley	R. I.	517 6th Street.
Grubbs, John Alexander	Va.	413 P Street.
Helmig, Casper Florian	Mo.	Gov. Printing Office.
Higgins, Charles Millington	W. Va.	60 Randolph Place.
Hildreth, Walter Henry	N. Y.	1533 15th Street.
A.B., 1892, A.M., 1904, Amherst College.		
Hopkins, Herbert Cornwell	D. C.	1608 Monroe Street.
Houghtelin, William Clarence	Kansas	1018 12th Street.
Johnson, Harry Dow	Mo.	U. S. Geological Survey.
Murdoch, Herbert Spencer	Miss	1131 10th Street.
Peck, George Francis	N. J.	1018 12th Street.
Smitten, George	D. C.	202 E Street.
Wilcox, Horace Leroy	Pa.	2610 University Place.
Young, Henry Cissel	Md.	1532 I Street.

Third Year.

Allen, Clyde William	S. D.	1000 M Street.
Davidson, Albert Sidney	Va.	119 Md. Ave., N. E.
Detmer, Charles Edwin	Mont.	1102 L Street.

Name.	Legal residence.	City address.
Eskin, Jacob Sidney	D. C.	619 Q Street.
Fred, Thomas William	Va.	1123 Euclid Street.
Handy, Joseph William	Mo.	807 10th Street.
Humeston, Andrew	Conn.	620 I Street.
Jackson, George Percival	N. Y.	1365 G Street, N. E.
Lawrence, William Francis	N. Y.	1025 10th Street, N. E.
Macdonald, Geo. Bertram Roper	D. C.	1115 G Street.
Martin, Francisco José	Costa Rica	513 6th Street.
Merritt, William Allison	D. C.	203 8th Street, N. E.
Murray, Fred Grant	D. C.	209 6th Street, N. E.
Pflug, Charles S	Utah	527 Mills Bldg., Annex.
Phillips, John Albert	Nebr.	73 Seaton Street.
Shea, James Edward	N. Y.	1317 8th Street.
Shoemaker, Charles Gardner	D. C.	3116 P Street.
Wood, James Frank	Mich.	30 Randolph Street.

Special.

Clinton, Ralph Stuart	N. Y.	Room 333, General Land Office.
D.D.S., 1906, The George Washington University.		
Woodruff, William Henry	D. C.	902 14th Street.
D.D.S., 1906, The George Washington University.		

Review.

Murphy, Don Francis	D. C.	2447 18th Street.
D.D.S., 1906, The George Washington University.		

Summary.

CANDIDATES FOR THE D.D.S. DEGREE:

First year	9	
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DEPARTMENT OF LAW.

Bachelor of Laws.

First Year.

Name.	Legal residence.	City address.
Aldrich, Charles Roberts	Ill.	1808 I Street.
B.A., 1903, Yale University.		
Anderson, Howard M	Ohio	1531 New Hampshire Av.
Arlitt, John Louis	Texas	2024 F Street.

Name.	Legal residence.	City address.
Barrick, Henry Llewellyn	Nebr.	1209 11th Street.
Biddle, Milton Scott	W. Va.	836 Vernum Street.
Bigoness, Octave Adelbert	D. C.	56 Q Street, N. E.
Birney, William McDonald	D. C.	1516 22d Street.
Brandenburg, Joseph Franklin	D. C.	915 French Street.
Brennan, John Ray	D. C.	The Astoria.
Briggs, Benjamin Franklin	Me.	Care of William F. White, Maryland Bldg.
Burson, Edgar Farrall	Kansas	1334 B Street, S. E.
Carpenter, Walter Clayton Ph.B., 1906, Brown University.	R. I.	Bureau of Standards.
Caywood, Charles Chester	D. C.	1436 Newton Street.
Childs, Frederick Willard	Vt.	The Champlain.
Clark, Chester Morrow	D. C.	The Concord.
Cragin, Harry Seymour	D. C.	1013 L Street.
Curtis, William Barnard	Md.	Lenox Street, Chevy Chase, Md.
Dallwig, Paul	Wisc.	23 Iowa Circle.
Dalzell, Robert Duff A.B., 1905, Yale University.	Pa.	1605 New Hampshire Ave.
De Lancy, Roi	Ohio	1226 12th Street.
Doyle, Connie B	D. C.	1133 Lamont Street.
Estabrook, Frank, Jr	Idaho	1810 G Street.
Foer, Albert	D. C.	1640 6th Street.
Forsaith, Clarence S	N. H.	6 B Street, N. E.
Fosselman, John Jones	Pa.	2901 14th Street.
Gable, Charles Lewis	Pa.	807 H Street, N. W.
Gaines, John Wesley, Jr	Tenn.	1325 G Street.
Garrett, Clyde Davis	D. C.	945 O Street.
Gilbert, Francesco Bernard	Pa.	1327 G Street.
Gonzalez, Antonio Cornelius, Jr	N. Y.	1417 K Street.
Graham, Lesley Stone B. Letters, 1906, Bethany College, W. Va.	Pa.	2123 18th Street.
Graves, Barak Thomas	D. C.	1236 13th Street.
Graves, Pleasant Fowler Ph.B., 1905, Southwestern University.	Texas	510 A Street, N. E.
Haselton, George Irving	N. H.	537 Massachusetts Ave.
Hemmick, Frank Schley	D. C.	1829 F Street.
Hester, Addison Reed	N. C.	1825 H Street.
Homer, John Albert	Utah	944 New York Ave.
Horner, Errol Osman	N. J.	Y. M. C. A.
Hunt, Shella Leigh	Wash.	The Plymouth.

Name.	Legal residence.	City address.
Hunter, Clyde Elliott	D. C.	Y. M. C. A.
Hutchins, Wells Aleck	D. C.	The Portner.
Jenkins, Warren Maxwell	Pa.	2506 Pennsylvania Ave.
A.B., 1906, Grove City College.		
Jobson, Alexander Blaikie	Pa.	Y. M. C. A.
A.B., 1901, Washington and Jefferson College.		
Johnson, Elbert Culbreth	Wash.	942 K Street.
Johnston, Cecil Wallace	Pa.	540 Y. M. C. A.
Kartack, Roy Ernest	Wisc.	1306 13th Street.
Kelly, Jerry E	S. D.	Senate Annex.
Kester, Bruce Randall	Pa.	1008 K Street.
Lawburgh, Robert Lee	Ind.	923 L Street.
A.M., 1905, De Pauw University.		
Lee, William Burch	La.	Riggs House.
McDermott, Charles William	Mass.	221 1st Street, N. E.
Macfarland, Henry B. F	D. C.	1727 F Street.
Meyer, Herbert Alton	Ohio	118 R Street, N. E.
Micou, Richard Dunnica	Va.	33 Home Life Bldg.
B.A., 1903, M.A., 1903, University of Virginia.		
Moll, Aristides	P. R.	537 21st Street.
A.B., University of Barcelona, Spain.		
Morrow, James Benjamin	D. C.	3123 13th Street.
Pearce, Harry Mamlin	Mich.	540, Y. M. C. A.
A.B., 1905, Albion College.		
Perry, Alexander Wallace	D. C.	2003 I Street.
Graduate, U. S. Military Academy.		
Prouty, Ward	Vt.	The Portner.
Pyle, Lawrence Augustus	D. C.	Fendall Building.
Reinohl, David Weimer	D. C.	Manor House.
Reyburn, William Stuart	D. C.	1785 Massachusetts Ave
Ph.B., 1904, Yale University.		
Rice, Frederick Joseph	D. C.	118 C Street, S. E.
Rowley, George I., Jr	Mass.	Y. M. C. A.
Shallenberger, Don	Ohio	1226 12th Street.
Smithers, Nathaniel Barratt	Del.	2002 G Street.
Smoot, John Daniel Kurtz	Va.	Langley, Va.
Stonebraker, Harold English	Pa.	645 Massachusetts Ave., N. E.
Stuart, Paul Allison	Pa.	2506 Pennsylvania Ave.
A.M., 1906, Washington and Jefferson College.		
Sullivan, Horace Moore	Tenn.	229 North Capitol Street.
Swenarton, Harold Augustus	N. J.	1336 I Street.
Ph.B., 1905, Yale University.		

Name.	Legal residence.	City address.
Tucker, John Randolph	Va.	602 Cameron Street, Alexandria, Va.
Tyrer, Arthur James	Wash.	The Albemarle.
Wagner, Harold J.	N. Y.	Dept. of Justice.
Warrington, Isaac Davisson	D. C.	1331 Vermont Ave.
Whiting, Roscoe Everett A.B., 1901, Bowdoin College.	Wash.	The Stratford.
Whitney, William Milton A.B., 1903, Ohio Wesleyan University.	Ohio	3068 Wisconsin Ave.
Wilson, Huntington B.A., 1897, Yale University.	Ill.	1155 16th Street.
York, Arthur Blaine	W. Va.	The Coywood.

Second Year.

Adams, George Royal	Mass.	Y. M. C. A.
Allen, Charles Louis	S. D.	1516 K Street.
Ambrose, George Lewis	Mont.	725 20th Street.
Arundell, Charles Rogers	D. C.	1636 R Street.
Atwell, Howard Johnson	Va.	711 A Street, N. E.
Banning, Archibald Tanner, Jr. A.B., 1904, Cornell University.	N. Y.	1445 Massachusetts Ave.
Barndollar, Burton Hack	Penn.	3510 New Hampshire Av.
Beall, John Christopher Wagner	D. C.	1016 East Capitol St.
Bell, Colley Wood	D. C.	The Melrose.
Berger, Bertram Philip	N. Y.	Civil Service Com.
Betts, Frank Marshall	Ark.	315 H Street.
Binsted, John Henry	D. C.	Conduit Road.
Biscoe, John Edward Grad. Engr., 1904, Virginia Military Technical Institute.	D. C.	813 21st Street.
Block, Karl Morgan B.A., 1906, The George Washington University.	D. C.	155 11th Street, N. E.
Boesch, Harry Luther	D. C.	616 E Street, N. E.
Bowen, Frank Hunter	Mass.	Dept. Com. & Labor.
Brandenburg, Edgar Thomas	Pa.	915 French Street.
Brunings, John Hermann	Ill.	Patent Office.
Calder, Albert Russell	Pa.	917 North Carolina Ave.
Campbell, Paul	Tenn.	229 North Capitol Street.
Carr, Ira J.	Mich.	Treasury Department.
Carrington, Edmund	D. C.	Mt. Vernon Apartments.
Christensen, Andrew	Utah	Room 232, P. O. Dept.
Church, Melville Durant	D. C.	1608 20th Street.
Cooke, H. Clay	Texas	Y. M. C. A.

Name.	Legal residence.	City address.
Couden, Fayette Dickinson	Mass.	1310 Columbia Road.
B. Sc., 1904, Massachusetts Agricultural College.		
Cutler, Harold Bert	Iowa	1516 K Street.
Dane, Walter Alden	Vt.	1445 Massachusetts Ave.
B.A., 1903, University of Vermont.		
Davenport, Lewis Howard	N. Y.	2624 University Place.
Davidson, Arthur William	Ohio	9 Grant Place.
A.B., 1899, Western Reserve University.		
Davis, Horace Webber	Pa.	2506 Pennsylvania Ave.
B.S., 1905, Washington and Jefferson College.		
Ellis, Leonidas Wilson	Ala.	1304 L Street.
Fravel, F. Russell	Mass.	619 22d Street.
Guy, Walter Bohrer	D. C.	308 5th Street, S. E.
Ph.B., 1905, Lafayette College.		
Haines, Milton	Ohio	905 13th Street.
B.S., O. N. U.		
Hardy, Edward Hugh	Ala.	1014 Massachusetts Ave.
Hartson, Clinton Henry	Wash.	2021 H Street.
Henault, Thomas Ransel	D. C.	2016 G Street.
Hendry, Moses Walton	Md.	Bethesda, Md.
A.B., 1903, Johns Hopkins University.		
Henry, Samuel Joseph	D. C.	Brookland, D. C.
Hepburn, Louis Frederick	Pa.	1517 H Street.
Hichborn, Philip Simmons	D. C.	1707 N Street.
Hindman, Albert Clare	Pa.	1208 N Street.
Hinshaw, Howard Raymond	Nebr.	The Dewey.
Holmes, Rexford Louis	Mo.	1114 D Street, N. E.
Hughey, Allen Harrison	Texas	Geological Survey.
B.A., 1903, Vanderbilt University.		
Ilustre, Eustacio S	P. I.	Room 33, War Dept.
Jensen, John	Utah	915 L Street.
B.A., 1906, University of Utah.		
Jones, Charles Andrews	D. C.	1319 F Street.
Jones, George Bayard	Mo.	33 B Street.
B.S., 1905, Massachusetts Institute of Technology.		
Jones, Robert McGuire	Va.	1736 G Street.
B.S., 1902, William and Mary College.		
Kellett, Joe Cabot	Ala.	935 K Street.
B.S., 1905, Oklahoma Agricultural and Mechanical College.		
Levin, Michael	Wisc.	1306 13th Street.
McClellan, George Browning	Hawaii	The Cumberland.
McLean, Hubert Gilbert	Mich.	1319 Irving Street.

Name.	Legal residence.	City address.
McNeal, Ira Bennett	Pa.	1301 K Street.
A.B., 1898, Dickinson College.		
McNeill, Frank Augustus	Va.	1430 W Street.
Mancha, Henry Howard	Mich.	1301 K Street.
Maphis, Frederick De Witt	Va.	1114 10th Street.
Mason, L. Randolph	Md.	1114 14th Street.
Miller, William Lewis	D. C.	500 5th Street.
Mitchell, Paul	Pa.	1804 M Street.
A.B., 1905, Allegheny College.		
Mitchell, William Hadwen	Mass.	University Club.
B.S. in Elec., 1905, Worcester Polytechnic Institute.		
Mueller, Curt Berthold	Ohio	G. W. U.
A.B., 1906, Cornell University.		
Murphy, William Ashford	Wash.	1103 10th Street.
Neal, Chester Trenholm	Mass.	1445 Massachusetts Ave.
B.A., 1905, Yale University.		
Owen, Claud Worthington	Md.	913 F Street.
Owens, Charles Francis	Md.	466 Louisiana Ave.
Patterson, James Frosst	D. C.	Room 618, Mills Bldg.
Patterson, Matthew Waren	Ark.	1391 F Street, N. E.
Phillips, Adon Daniel	N. Y.	715 Lawrence St.
B.S., 1906, The George Washington University.		
Phillips, Ivon William	N. Y.	3618 11th Street.
Pretzfelder, Leon	Va.	Room 407, P. O. Dept.
Ramsey, George William	Ill.	Patent Office.
Rathbun, Don Seavey	Iowa	War Department.
B.S., 1904, Cornell University.		
Rehr, Paul Allen	Pa.	1736 G Street.
Riddleberger, Harrison Heath	Va.	U. S. Senate.
Roberts, George F.	Mo.	1443 East Capitol Street.
Roche, Sidney	D. C.	1325 1st Street, S. W.
Rodier, Henry Tait	D. C.	1334 Wallach Place.
Rowe, James Hubert Joseph	N. J.	The Oxford.
Russell, Arthur Jasper	Pa.	930 16th Street.
Rutherford, Reginald	Md.	922 French Street.
Scantling, Philip Lee	D. C.	1213 New Jersey Ave.
Sheridan, James MacDermott	Colo.	1736 G Street.
Smith, Dyer	Pa.	The Woodley.
M.E., 1903, Lehigh University.		
Smith, Ellison Griffith	S. D.	1516 K Street.
Smith, George Thomas	Md.	Room 234, P. O. Dept.
Stein, Simon Bernard	Mass.	904 Westminster Street.
Stevenson, Charles	N. Y.	836 Varnum Street.

Name.	Legal residence.	City address.
Stull, Howard William	Pa.	Takoma Park.
Sunderlin, Louis Kossuth	Iowa	The New Berne.
Swayze, Samuel	N. J.	1614 Rhode Island Ave.
Taylor, Louis Ralph	Ill.	The Iroquois.
Tracey, Frederick H	Ohio	1842 Monroe Street.
Turner, Robert Hite	Va.	507 H Street.
Twyeffort, Frank Hubbard	N. Y.	1736 G Street.
Ulke, Titus	D. C.	411 15th Street.
B.S., 1885, Columbian University. E.M., 1889, Royal Academy of Mines, Freiberg, Saxony.		
Weddell, Alexander Wilbourne	Va.	1901 I Street.
Weed, Theodore Linus	D. C.	1232 Massachusetts Ave.
West, William	Ky.	1718 Corcoran St.
Whalley, William John	D. C.	1218 Georgia Ave., S. E.
Whitten, William Henry, Jr.	Ill.	1123 Fairmont Street.
B.S., 1896, M.S., 1897, Massachusetts Institute of Technology.		
Wiggins, Ernest	S. C.	1322 Rhode Island Ave.
A.B., 1899, Wofford College.		
Willis, Robert Chadwick	N. C.	706 Munsey Building.
A.B., Guilford College.		
Wilson, Ira Jay	Wisc.	Room 112, Patent Office.
Yocum, Wilbur Elmore	Fla.	1807 Phelps Place.
B.A., 1898, Florida Agricultural College.		

Third Year.

Acton, Robert Dow	Ill.	711 Bond Building.
Agnew, Albert Conant	Ind. Ter.	1213 N Street.
Alden, Henry Palmer	D. C.	1308 S Street.
Amadeo y Gely, Antonio José	P. R.	1406 15th Street.
LL.B., 1906, Grant University.		
Amiss, T. Brooke, Jr	N. Y.	9, The Henrietta.
Andrews, Edward Hopkins	Mich.	1337 Columbia Road.
A.B., 1902, Olivet College.		
Baker, Arthur George	Mass.	P. O. Dept.
B.A., 1903, Amherst College.		
Ballard, William Reed	Ind.	2626 University Place.
Barth, John Frederick	Ky.	Post Office Department.
Barker, William Judson	D. C.	142 13th Street, S. E.
Bowlby, John Hudson	Nebr.	1720 H Street.
A.B., 1903, Doane College. M.A., 1906, University of Nebraska.		
Bowyer, Joseph McCarter	Pa.	The Westmoreland.
B.S., 1904, Princeton University.		

Name.	Legal residence.	City address.
Braddock, Ernest Reeves	Md.	1906 3d Street.
Brearton, James Mitchell	Ill.	2021 H Street.
Buffington, William E.	Pa.	1501 11th Street.
Burriss, John Murray	Kansas	1615 Florida Ave.
Carnes, Samuel Clifford	Ohio	2021 H Street.
Christian, Charles Frederick	Ind.	1203 N Street.
Cowgill, Guy Milton A.B., 1902, University of Nebraska.	Iowa	1720 H Street.
Crain, Kenneth B.A., 1902, University of Louisville.	Ky.	1829 G Street.
Deller, Luster K.	Ind.	21 P Street.
Duffey, Louis Nelson	Va.	Alexandria, Va.
Dunning, Daniel Alfred	Utah	1419 Chapin Street.
Fitz Gerald, Shepler Ward	D. C.	3515 11th Street.
Gammon, Nathan	Tenn.	1931 K Street.
Garner, Henceford Noel	Va.	Alexandria, Va.
Geissler, Mahlon Hobart	Conn.	927 L Street.
Gerry, Charles Fusting	Md.	1217 N Street.
Gilchrist, Walter Schell A.B., 1902, Georgetown College.	D. C.	717 East Capitol Street.
Giles, Louis Edward B.S., in E.E., Columbian University.	Mich.	1608 15th Street.
Glennan, Arthur Wyman	D. C.	Chevy Chase, Md.
Groomes, Leonard Weer	Md.	1405 New York Ave.
Gusack, Samuel Victor	D. C.	921 Westminster Street.
Guyton, Joseph Daniel B.S., 1901, Mississippi Agricultural and Mechanical College.	Miss.	1921 G Street.
Hallam, Paul Rankin	Ky.	504 Seward Square, S. E.
Hand, Robert G. B.S., 1899, Mississippi Agricultural and Mechanical College.	Miss.	1216 Girard Street.
Harding, Lee Robert	Iowa	Chevy Chase, Md.
Hattersley, Ralph Marshall	Ohio	1931 13th Street.
Henkel, Myron Freeman	Ill.	1931 K Street.
Hogg, William Leonard A.B., 1904, Colorado College.	Colo.	1517 P Street.
Hoover, Dickerson Naylor, Jr.	D. C.	413 Seward Square, S. E.
Huffman, Charles Jones	Ill.	1343 Girard Street.
Irion, Harry	Colo.	414 A Street, S. E.
Keeler, Earle Leslie	Mass.	918 H Street.
Kennedy, John Thomas	Pa.	Y. M. C. A.
Langmade, Robert Grover	N. Y.	1203 N Street.
Law, Frank A., Jr.	D. C.	1627 14th Street.

Name.	Legal residence.	City address.
Leech, Wilmer Ross	Md.	2302 1st Street.
Lees, Fred	Kansas	Forest Service.
A.B., 1900, Washburn College.		
Leet, Alfred Boyan	D. C.	1739 19th Street.
Lewis, Henry Latané	Md.	1413 G Street.
Lewis, William J	N. H.	1113 M Street.
Lundy, Elmer Johnston	Ark.	1613 13th Street.
B.S., 1899, Dickson College.		
Manning, Lawrence Warren	Ky.	1611 Riggs Place.
Mead, Thomas L	Ohio	3022 R Street.
Ph.B., 1901, Western Reserve University.		
Melby, Charles Beach	Wisc.	1517 P Street.
Merrill, Henry Pettingale	D. C.	1760 Willard Street.
Moore, Robert Irwin	Tenn.	1408 M Street.
B.A., 1898, Vanderbilt University.		
Morris, Charles Meyer	Utah	15 6th Street, N. E.
Morris, Jackson	Ky.	1723 Willard Street.
Needham, Hubbard Smith	Ky.	2024 G Street.
Neighbors, Henry Fletcher	N. Y.	1760 Church Street.
Packard, Edwin Augustus	Mass.	226 2d Street, N. E.
B.S., 1899, Massachusetts Institute of Technology.		
Paddock, William Waterman	Iowa	1521 Vermont Ave.
Peake, William Thomas	D. C.	121 10th Street, N. E.
Phair, Philip De Witt	Maine	131 A Street, N. E.
M.A., 1906, Harvard University.		
Prettyman, William Forrest	Md.	G. W. U.
M.A., 1904, Randolph Macon College.		
Roberts, Ora Herbert	Texas	1443 East Capitol Street.
Ross, Montague Sutton	Tenn.	1931 K Street.
A.B., 1903, University of Nashville.		
Schommer, John B	Wisc.	Union Building.
Smith, John Abdiel	Pa.	1114 New York Ave.
Smith, James Cheetham	Pa.	
Stadden, Corry Montague	Ohio	3002 13th Street.
Staples, Euguen Washington	Maine	814 11th Street, N. E.
Steele, Benjamin Ulen	Ky.	111 12th Street, S. E.
Steenerson, Benjamin Gilbert	Minn.	1804 G Street.
Stewart, Edward Smith	Md.	1121 8th Street.
Swank, Walter Ray	Colo.	Y. M. C. A.
Taylor, Rowland Corwin	Ohio	2018 G Street.
Thomas, Enfield Hoge	Va.	Room 306, P. O. Dept.
Thompson, William Enos	Ill.	Treasury Department.

Name.	Legal residence.	City address.
Tuckerman, Walter R.	D. C.	1515 Massachusetts Ave.
B.A., 1903, Harvard University.		
Tyler, Frank E.	Miss.	Geological Survey Bldg.
Veley, Omar Jay.	N. Y.	1369 Emerson St., N. E.
Voorhis, Charles D.	N. J.	
Wallace, Reuben Staten.	Md.	206 Elm Street.
Washington, Richard Blackburn.	Va.	Library of Congress.
Weeks, Edward Mitchell.	Pa.	Cleveland Park.
Weir, Taylor Bladen.	Va.	Dept. of Agriculture.
Whippler, Frederic R.	D. C.	The Cairo.
Williams, Henry Trumbull.	Mass.	1446 Massachusetts Ave.
S.B., 1903, Harvard University.		
Williamson, James McGowan.	D. C.	1210 S Street.
Wilmot, Wilson Eardley.	N. Y.	2224 F Street.
Winbourn, Robert Emmet.	Colo.	1517 P Street.
Woodward, Franklin Tuthill.	D. C.	915 S Street.
A.B., 1901, Dickinson College.		
Woolsey, Lester Hood.	N. Y.	1404 Park Road.
A.B., 1901, Harvard University.		
Woolverton, William Hand.	Miss.	1216 Girard Street.
B.A., 1903, Dartmouth College.		

Special.

Ballard, William Reed.	Ind.	Room 105, Patent Office.
Boyden, John Hanson.	Va.	1014 K Street.
B.S. in E.E., 1906, The George Washington University.		
Cartwright, Otis Thomas.	D. C.	3014 Dent Place.
Denby, Charles.	D. C.	1308 Connecticut Ave.
A.B., 1882, Princeton University.		
Finney, Harry Whiting.	D. C.	2204 Q Street.
Gerdsen, William Cornelius.	Minn.	907 M Street.
M.S., 1905, The George Washington University.		
Hall, Mark Anthony.	D. C.	706, The Sherman.
Hastings, Grover Cleveland.	D. C.	2812 13th Street.
Hopkins, Fred Merriam.	Mich.	U. S. Patent Office.
Hughes, Patrick Whistead.	W. Va.	1011 H Street.
Jones, William Phelps.	N. Y.	920 C Street, N. E.
E.E., 1898, Columbia University.		
Philips, Henry Hyman.	N. C.	1122 Vermont Ave.
B.S., 1905, LL.B., 1906, University of North Carolina.		
Pillow, Gideon Johnston.	La.	1464 Clifton Street.

Name.	Legal residence.	City address.
Sherier, Joseph Tyler	D. C.	611 Jenifle Building.
LL.B., 1904, Columbian University.		
Smith, Delos Hamilton	Ariz.	1905 F Street.
B.S. in Architecture, 1906, The George Washington University.		
Terry, David Dickson	Ark.	U. S. Senate.
Thomas, Bert Carl	Ohio	1124 10th Street.

Review.

Anderson, Edward Dunning	D. C.	2813 14th Street.
LL.B., 1903, Columbian University.		
Bielaski, Alexander Bruce	Md.	Department of Justice.
LL.B., 1904, The George Washington University.		
Ellison, William Bascom	Tenn.	3013½ Sherman Ave.
LL.B., 1905, The George Washington University.		
English, Walter Charles	D. C.	2907 P Street.
LL.M., 1905, The George Washington University.		
Fuller, Charles Franklin	N. Y.	1320 U Street.
B.S., 1901, LL.B., 1906, The George Washington University.		
Goodall, Milo B	Wisc.	427 15th Street, S. E.
LL.B., 1906, The George Washington University.		
Hathaway, Alvin Dolph	Ky.	1326 New York Ave.
LL.B., 1905, The George Washington University.		
Hazard, Elmont Bibb	D. C.	320 E. Street, N. E.
LL.B., 1906, The George Washington University.		
James, Charles Grant	Ohio	Bureau of Pensions.
LL.B., 1905, The George Washington University.		
Lockwood, Carl	D. C.	23 7th Street, S. E.
LL.B., 1902, The George Washington University.		
Morgan, Eugene	D. C.	1332 I Street.
LL.B., 1881, LL.M., 1891, Columbian University.		
Oberlin, Paca	Va.	1238 5th Street.
LL.B., 1903, LL.M., 1904, Colorado University.		
Reinohl, William Parker	D. C.	912 F Street.
LL.B., 1901, Columbian University.		
Rhodes, Fred Burnett	Md.	1488 Newton Street.
LL.B., 1905, The George Washington University.		
Spinks, Edgar	Miss.	General Land Office.
LL.B., 1905, The George Washington University.		
Taggert, Giles Russell	N. J.	608 Harvard Street.
B.S., 1900, LL.B., 1906, The George Washington University.		

Name.	Legal residence.	City address.
Wilmeth, Warner Lambeth	Texas	1706 9th Street.
LL.B., 1906, The George Washington University.		
Woods, Walter Orr	Kansas	292 War Department.
LL.B., 1906, The George Washington University.		

Master of Laws.

Brooke, John Cooke	Va.	820 6th Street.
B.S., 1901, Virginia Polytechnic Institute.		
LL.B., 1905, Georgetown University.		
Brothers, Charles Shields	Miss.	1931 K Street.
LL.B., 1902, University of Mississippi.		
Clark, Daniel Nelson	D. C.	Wash. Loan and Trust Building.
LL.B., 1901, Highland Park College of Law.		
Cronin, Patrick D	Mass.	1519 Vermont Ave.
LL.B., 1902, Columbian University.		
Flowers, Allen Gilbert	S. C.	2909 13th Street.
LL.B., 1906, The George Washington University.		
Garnett, Philip Manly	N. H.	1347 U Street.
LL.B., 1906, The George Washington University.		
Harralson, Morris	Ga.	1016 15th Street.
LL.B., 1906, The George Washington University.		
Morris, Jackson	Ky.	1723 Willard Street.
Phillips, Francis John	N. Y.	Bureau of Immigration and Naturalization.
LL.B., 1906, The George Washington University.		
Sanders, Franklin Oliver	Pa.	2909 13th Street.
LL.B., 1906, The George Washington University.		
Simpson, James T	N. H.	Treasury Department.
LL.B., 1906, The George Washington University.		
Sommers, Walter Allwood	N. Y.	657 F Street, N. E.
LL.B., 1905, St. Lawrence University.		
LL.B., 1906, The George Washington University.		
Stelle, William Harrison	Ill.	230 North Capitol Street.
LL.B., 1906, University of Illinois.		
Stetson, Frank	D. C.	Nat'l Safe Deposit Savings and Trust Co.
LL.B., 1906, The George Washington University.		
Swingle, Edwin Allan	D. C.	807 T Street.
LL.B., 1906, The George Washington University.		
Weitzel, Fred William	Ky.	1219 Harvard Street.
LL.B., 1906, The George Washington University.		

Review.

English, Walter Charles	D. C.	2907 P Street.
LL.B., 1903, LL.M., 1905, The George Washington University.		

Name.	Legal residence.	City address.

Fenton, Theodore Cornell.....Pa. .....1763 Church Street.
LL.B., 1892, LL.M., 1893, M. E., 1900, Columbian University.

Gow, Bernard Arthur.....Mo. .....921 8th Street.
LL.B., 1896, Missouri State University.
LL.M., 1904, Columbian University.

Logan, Charles Bryce.....Mo. .....900 M Street.
LL.B., 1903, Kansas City School of Law.
LL.M., 1905, The George Washington University.

Morgan, Eugene .....D. C. .....1322 I Street.
LL.B., 1881, LL.M., 1891, The George Washington University.

Oberlin, Paca .....Va. .....1238 5th Street.
LL.B., 1903, LL.M., 1904, Colorado University.
M.Dip., 1905, The George Washington University.

Master of Patent Law.

Anderson, John Henry.....Ohio .....2024 G Street.
LL.B., 1906, National University.

Benfer, James Pomeroy.....Ohio .....Geological Survey.
LL.B., 1898, Georgetown University.
LL.M., 1900, Columbian University.

Bon Durant, William Wilson.....Ill. .....Mount Rainier, Md.
LL.B., 1906, Washington College of Law.

Bryant, Emory Addison.....D. C. .....3440 Brown Street.
LL.B., 1906, National University.
D.D.S., 1886, Baltimore College of Dental Surgery.

Calver, Arthur Walter.....D. C. .....1721 P Street.
LL.B., 1905, National University.

Coflin, Charles Buxton.....D. C. .....1116 15th Street.
LL.B., 1906, The George Washington University.

Colford, Ethel Marguerite....Nova Scotia.2310 20th Street.
LL.B., 1903, LL.M., 1904, Washington College of Law.

Colford, Florence Agnes.....Nova Scotia.2310 20th Street.
LL.B., 1903, LL.M., 1904, Washington College of Law.

Duras, Charles Otto.....Nebr. .....Y. M. C. A.
LL.B., 1906, National Law School.

Fenton, Theodore Cornell.....D. C. .....1763 Church Street.
LL.B., 1892, LL.M., 1893, M.E., 1900, Columbian University.

Griesbauer, John Andrew, Jr.....D. C. .....1221 Irving Street.
LL.B., 1905, The George Washington University.

Hodges, Lewis .....D. C. .....1607 Irving Street.
LL.B., 1906, The George Washington University.

Name.	Legal residence.	City address.
Hyde, Elbert Lewis. B.S., 1903, Case School of Applied Science.	Ohio	1814 North Capitol St.
Keller, Arthur Ripont. C.E., 1903, Cornell University. LL.B., 1906, National University Law School.	N. Y.	1306 Corcoran Street.
Lyons, Charles S.	Ky.	Isthmian Canal Commission.
Mason, Eugene George. LL.B., 1906, National Law School.	D. C.	Wash. Loan and Trust Building.
Pack, Samuel Bernard. LL.B., 1906, National Law School.	Pa.	2443 Ontario Road.
Russell, Bert. A.M., 1903, University of Minnesota. LL.B., 1906, Georgetown University.	Md.	318 Patent Office.
Siebold, William Otto. LL.B., 1906, National University. B.S., 1895, Cornell University.	N. Y.	1549½ 3d Street.
Sizer, Adrian. LL.B., 1901, LL.M., 1902, Georgetown University.	Pa.	Colorado Building.
Swift, Dean. LL.M., 1901, National University.	Va.	505 7th Street.
Toohey, Frank	Mass.	Room 167, Patent Office.
Van Nest, Raymond Henry. LL.B., 1906, Georgetown University.	D. C.	Room 242, Patent Office.

Review.

Anderson, Edward Dunning. LL.B., 1903, Columbian University.	D. C.	2813 14th Street.

Auditor.

Clift, James Walter. LL.B., 1902, National Law School.	D. C.	1434 Chapin Street.

Summary.

Candidates for the LL.B. Degree:			
First year	79		
Second year	107		
Third year	97		
		283	
Special	17		
Review	18	35	
Candidates for the LL.M. Degree	16		
Review	6		22
Candidates for the M.P.L. Degree	23		
Review	1		
Auditor	1	25	
			365

DEPARTMENT OF POLITICS AND DIPLOMACY.

Doctor of Civil Law.

Name.	Legal residence.	City address.
Miller, Clarence Alphonso	Mo.	Bureau of Corporations.

LL.B., 1899, Kansas City School of Law.
LL.M., M.Dip., 1906, The George Washington University.

Master of Diplomacy.

Dorsey, Roscoe J. C.	Pa.	1217 I Street.

LL.B., 1902, LL.M., 1903, Georgetown University.

Special.

Aldridge, W. T.	D. C.	833 Allison Street.
Baden, James H.	D. C.	5 S Street, N. E.
Bagby, R. H.	Va.	703 8th Street, S. E.
Bedford, A. H.	Md.	15th and L Streets.
Bowman, John A.	D. C.	61 I Street.
Childs, W. H.	Md.	3014 Dent Place.
Cissel, Robert Ashton	D. C.	2117 Pennsylvania Ave.
Claxton, A. B.	D. C.	1682 Irving Street.
Devereux, Frank B.	D. C.	The Nansemond.
Eckloff, Charles C.	D. C.	429 I Street.
Evans, J., Jr.	Md.	1925 G Street.
Faber, J. D.	Md.	Takoma Park, D. C.
Fawcett, E. S.	Va.	Alexandria, Va.
Fisher, Arthur Ames.	D. C.	1833 V Street.
Frost, Paul Delevan.	Iowa	926 Westminster Street.
Gilmore, Frank B.	Pa.	411 4½ Street.
Hanna, Charles W.	D. C.	1827 North Capitol St.
Haynes, H. V.	Pa.	1346 Kenyon Street.
Heimbeck, Adolph James	Iowa	297 Treasury Dept.

M.Dip., 1905, The George Washington University.

Herrell, Ernest G.	Va.	515 Seward Square, S. E.
House, H. S.	Mo.	1526 O Street.
Jacobsen, C. F.	D. C.	1908 N Street.
Magruder, Willis B., Jr.	D. C.	2032 North Capitol St.
Marshall, Thomas, Jr.	Va.	1737 Willard Street.
Moore, George W.	Md.	45 Quincy Street.
Moore, Thomas E.	Md.	45 Quincy Street.
Payne, E. E.	Va.	Alexandria, Va.
Petty, John A.	D. C.	1409 Chapin Street.

Name.	Legal residence.	City address.
Phelps, Horace J.	Mo.	The Iowa.
Pierce, Carrall	Va.	Alexandria, Va.
Poole, John	W. Va.	1838 4th Street.
Poole, William T.	D. C.	1911 4th Street.
Ricoy, Luis	Mexico	1415 I Street.
Riordon, John M.	Va.	401 6th Street, S. E.
Ritchie, Wayne	D. C.	2560 Wisconsin Ave.
Settle, J. C.	Ga.	1310 Wallach Place.
Tillman, Lloyd M.	Tenn.	1328 Euclid Street.
Whitaker, Wallace A.	D. C.	1741 Park Road.
Wilson, E. P.	D. C.	2145 California Ave.
Wolfe, Edmund S.	D. C.	21 T Street.

Review.

Heimbeck, Adolph James. Iowa. Treasury Department.
M.Dip., 1905, The George Washington University.

Summary.

Candidate for the D. C. L. Degree	1
Candidate for the M. Dip. Degree	1
Special	40
Review	1
	43

NATIONAL COLLEGE OF PHARMACY.

Doctor of Pharmacy.

Freshmen.

Name.	Legal residence.	City address.
Bailey, Ray T.	D. C.	116 C Street, N. E.
Bell, Miles William	Pa.	1235 W Street, N. W.
Boone, Benj. B.	Ala.	1656 Munroe St., N. W.
Crosen, George Robert	Va.	1222 C Street, S. W.
Davis, Jno. F., Jr.	D. C.	601 9th Street, N. E.
Gaines, George Raymond	Va.	Alexandria, Va.
Gill, Theodric Leith	Va.	9th and P Streets, N. W.
Harbaugh, Lewis M.	D. C.	1375 Emerson St., N. E.
Harris, Eugene	D. C.	608 Albany Street, N. E.
Hines, Arnold S.	Utah	1246 11th Street, N. W.
Hanback, Clifford	D. C.	44 N. Y. Ave., N. E.

Name.	Legal residence.	City address.
Jones, Thos. Quinn	Mo.	1202 N Street, N. W.
Jones, Wm. Sidney	Va.	817 Prince Street, Alexandria, Va.
Jenkins, Lawrence J	Va.	510 Maine Ave., S. W.
Linton, Howard	Md.	311 S Street, N. W.
Lynham, Calvin L	D. C.	1213 4½ Street, S. W.
Milburn, Frank N	Va.	Alexandria, Va.
MacWilliams, Norbert	Md.	354 I Street, S. W.
Nyce, Benj. B	D. C.	2d and Pa. Ave., S. E.
Payne, Edward F	Va.	123 C Street, N. E.
Payne, Daniel Beeckner	Va.	616 G Street, S. W.
Perkins, Wallis C	Md.	942 P Street, N. W.
Reese, Chauncey Clifford	Md.	18 Quincey Place.
Richardson, Irene Nellie	D. C.	1308 U Street, N. W.
Robey, Frank A	Va.	Herndon, Va.
Sanford, Joseph William	D. C.	N. Capitol Street and New York Ave., N. W.
Senay, Harry J	D. C.	439 K Street, N. W.
Simmons, John William	D. C.	36 and O Streets, N. W.
Schroeder Robert M	D. C.	524 9th Street, S. E.
Simpson, Harry N	D. C.	461 I Street, S. W.
Tewksbury Melville B	Kansas	16 3d Street, S. E.
Vaughn, Draper	Md.	Oakland, Md.
Widmayer, William	D. C.	3129 Brightwood Ave., N. W.
Yeatman D. Ammen	D. C.	1729 F Street, N. W.

Juniors.

Boyer, W. Robey	Md.	14th and P Streets.
Deming, Carroll G	D. C.	937 K Street.
Eppard, George I	Va	1921 G Street.
Everett, James T	D. C.	133 12th Street, N. E.
Floyd, Henry B	Ark.	1016 Massachusetts Ave.
Hughes, Henry D	D. C.	28th and N Streets.
Leatherland, Lawrence C	Va.	King and Alfred Streets, Alexandria, Va.
Nolan, James I	Ill.	1164 5th Street, N. E.
Pozen, Morris A	D. C.	1410 I Street.
Saeb, George R	D. C.	617 9th Street, N. E.
Spencer, Robert Bruce	N. C.	Falls Church, Va.
Steele, Ernest H	Va.	Kensington, Md.
Timberlake, T. O	Va.	1101 13th Street.
Thibadeau, Richard B	Ga.	Virginia Flats.
Thompson, Milton C	D. C.	430 8th Street, S. E.
Thorn, William D	D. C.	1412 35th Street.

Seniors.

Name.	Legal residence.	City address.
Colby, Herman H.	Germany	U. S. Naval Hospital, 9th and Pa. Av., S. W.
Cantwell, William J.	D. C.	455 Massachusetts Ave., N. W.
Day, Alvin N.	N. J.	E. Capitol and 11th Sts., N. E.
Jacobs, Jno. R.	N. Y.	419 H Street, N. W.
Keister, John T.	Va.	Bureau of Chem. Agric. Department.
Laubinger, Louis	Germany	228½ Q Street, N. W.
Lantz, H. H.	Va.	14th & U Streets, N. W.
Madigan, Robert Emmett.	D. C.	432 Monroe Street, Anacostia, D. C.
Myers, Robert I.	D. C.	120 Florida Ave., N. W.
Nelson, Stella	Okla.	1st and C Streets, N. W.
O'Neill, A. J.	D. C.	710 10th Street, N. E.
Preuss, Benno. R.	Texas	227 P Street, N. W.
Pitzer, Frederick Hazen.	D. C.	5th & E. Capitol Streets.
Richardson, Mary H.	Ohio	3d and Pa. Ave., N. W.
Sacks, Louis	Germany	3233 M Street, N. W.
Spire, W. Burton.	N. Y.	1120 C Street, S. W.
Schulze, Gustave H., Jr.	D. C.	1751 L Street, N. W.
Troxler, Robert F.	Ky.	229 N. J. Ave., S. E.

Students Taking Special Courses.

Cooney, J. P.	D. C.	Mills Building.
Houghton, A. M.	D. C.	3064 Q Street, N. W.
Sullivan, Arthur H.	D. C.	1461 Chapin St., N. W.

Summary.

CANDIDATES FOR THE PHAR.D. DEGREE:

Freshmen	34	
Juniors	16	
Seniors	18	
		68
Special		3
Total		71

GEOGRAPHICAL DISTRIBUTION OF STUDENTS.

United States.	G. S.	C. C.	W.C.E.	Arch.	Teach.	Med.	Dent.	Law.	P. & D.	Phar.	Total.
Alabama	...	3	....	...	...	1	...	3	...	1	8
Arizona	...	....	....	...	...	....	...	1	...	..	1
Arkansas	...	1	....	...	...	....	...	4	...	1	6
California	1	1	1	...	...	3	...	....	...	..	6
Colorado	...	2	....	...	...	1	...	5	...	..	8
Connecticut	1	....	1	...	...	....	1	1	...	..	4
Delaware	...	1	....	...	...	....	...	1	...	..	2
District of Columbia	24	107	64	17	83	49	12	86	17	31	490
Florida	...	....	1	...	...	2	...	1	...	..	4
Georgia	...	....	....	...	...	1	...	1	1	1	4
Idaho	...	....	....	...	...	1	...	1	...	..	2
Illinois	...	5	4	...	1	13	1	13	...	1	38
Indian Territory	...	....	....	...	...	....	...	1	...	..	1
Indiana	1	7	1	...	...	5	1	5	...	..	20
Iowa	2	3	1	...	...	3	...	6	3	..	18
Kansas	...	2	....	...	...	2	2	4	...	1	11
Kentucky	1	1	2	...	...	4	...	12	...	1	21
Louisiana	...	....	....	...	...	5	...	2	...	..	7
Maine	...	....	....	2	...	....	...	3	...	..	5
Maryland	8	8	17	5	4	12	2	18	6	6	86
Massachusetts	4	1	....	...	2	6	1	15	...	..	29
Michigan	...	3	1	1	...	6	1	7	...	..	19
Minnesota	1	3	2	...	...	3	...	2	...	..	11
Mississippi	1	....	....	...	...	1	1	6	...	..	9
Missouri	...	3	1	...	...	3	3	5	3	1	19
Montana	...	....	....	...	...	....	1	1	...	..	2
Nebraska	...	....	1	...	...	2	1	4	...	..	8
New Hampshire	1	3	1	...	...	2	...	5	...	..	12
New Jersey	1	1	1	1	1	4	1	6	...	1	17
New York	5	5	4	...	1	10	5	21	...	2	53
North Carolina	1	2	2	...	...	6	...	3	...	1	15
North Dakota	...	....	1	...	...	1	...	....	...	..	2
Ohio	3	10	2	...	...	5	1	19	...	1	41
Oklahoma	1	3	....	...	...	3	...	....	...	1	8
Oregon	...	1	....	1	...	....	...	....	...	..	2
Pennsylvania	6	10	13	3	3	21	4	33	3	1	97
Rhode Island	...	1	1	...	...	1	2	1	...	..	6
South Carolina	...	2	1	...	...	4	1	2	...	..	10
South Dakota	...	1	2	...	...	1	1	3	...	..	8
Tennessee	3	1	....	...	...	2	...	7	1	..	14
Texas	1	2	....	...	...	3	...	6	...	1	13
Utah	...	....	1	...	...	4	2	5	...	1	13
Vermont	1	1	....	...	...	1	...	3	...	..	6
Virginia	3	12	9	2	3	23	5	21	7	15	100
Washington	1	1	1	...	...	1	...	6	...	..	10
West Virginia	...	2	....	...	...	3	1	3	1	..	10
Wisconsin	...	5	1	1	...	2	1	7	...	..	17
Wyoming	...	....	1	...	...	....	...	....	...	..	1
Total United States	71	214	138	33	98	220	51	359	42	68	1,294

GEOGRAPHICAL DISTRIBUTION OF STUDENTS—Continued.

Foreign countries.	G. S.	C. C.	W.C.E.	Arch.	Teach.	Med.	Dent.	Law.	P. & D.	Phar.	Total.
Australia	...	1	....	...	...	....	...	....	...	..	1
China	...	1	....	...	...	1	...	....	...	..	2
Corea	...	1	....	...	...	....	...	....	...	..	1
Costa Rica	...	....	....	...	...	....	1	....	...	..	1
England	...	....	....	1	...	....	...	....	...	..	1
Finland	...	....	....	...	...	1	...	....	...	..	1
Germany	3	1	1	...	...	....	...	....	...	3	8
Hawaii	...	....	....	...	...	1	...	1	...	..	2
Mexico	...	....	1	...	...	....	...	....	1	..	2
Nova Scotia	...	....	....	...	...	....	...	2	...	..	2
Peru	...	....	....	1	...	....	...	....	...	..	1
Porto Rico	...	....	1	...	...	....	...	2	...	..	3
Philippines	...	....	....	...	...	....	...	1	...	..	1
Russia	...	....	....	...	...	1	...	....	...	..	1
Uruguay	...	....	....	...	...	1	...	....	...	..	1
Total foreign countries	3	4	3	2	...	5	1	6	1	3	28
Total United States	71	214	138	33	98	220	51	359	42	68	1,294
Grand total	74	218	141	35	98	225	52	365	43	71	1,322

RECAPITULATION.

MEMBERS OF THE FACULTIES AND TEACHING STAFF:

Professors	85	
Assistant Professors	27	
Instructors, Demonstrators, and Assistants	72	
Lecturers	16	
Librarians and Assistants	8	
Total		208

STUDENTS:

Graduate	76	
Undergraduate	492	
Professional	754	
		1322
Duplicates		30
Total		1292

	Faculty.		Students.	
DEPARTMENT OF ARTS AND SCIENCES:				
Faculty of Graduate Studies	41		74	
Columbian College	40		218	
Washington College of Engineering	28		141	
Division of Architecture	24		35	
In attendance upon the Courses for Teachers	13		98	
		146		566
FACULTY OF MEDICINE:				
Department of Medicine	81		225	
Department of Dentistry	37		52	
		118		277
DEPARTMENT OF LAW		20		365
DEPARTMENT OF POLITICAL SCIENCES		23		43
NATIONAL COLLEGE OF PHARMACY		10		71
Totals		317		1322
Duplicates		109		30
Totals		208		1292

Degrees Conferred.

DEGREES CONFERRED AT COMMENCEMENT, 1906.

IN COURSE.

Doctor of Philosophy.

Cornelius Lott Shear, Maryland.
B.S., 1896, M.S., 1900, University of Nebraska.

Martin Norris Straughn, Maryland.
B.S., 1899, Maryland Agricultural College.
M.S., 1902, Columbian University.

Master of Arts.

Augusta Moulton De Forest, Kansas.
B.A., 1905, The George Washington University.

Maud Esther McPherson, Illinois.
B.A., 1905, The George Washington University.

Walter Clement Shields, Pennsylvania.
B.A., 1904, Moravian College.

Nellie Scribner Spencer, District of Columbia.
B.A., 1901, Hiram College.

Mary Elsie Turner, District of Columbia.
B.A., 1902, Columbian University.

Master of Science.

Harry Coope, Ohio.
M.P.L., 1901, Columbian University.
B.S., 1905, The George Washington University.

Sheldon Heber Graves, Vermont.
B.S., 1904, Columbian University.

George William Hoover, Oklahoma.
B.S., 1903, Oklahoma Agricultural College.

Donald Francis McDonald, Washington.
B.S., 1905, University of Washington.

Frederick Denison Owen, Connecticut.
B.S., 1905, The George Washington University.

Civil Engineer.

Edwin Vivian Dunstan, Virginia.
B.S. in C.E., 1905, The George Washington University.

Oscar Alexander Mechlin, District of Columbia.
B.S., 1903, Dartmouth College.

Electrical Engineer.

Charles Nichols Gregory, New York.
B.S. in E.E., 1905, The George Washington University.

James Muscoe Matthews, Virginia.
B.S. in E.E., 1905, The George Washington University.

Mechanical Engineer.

Frederick Wilhelm Albert, Pennsylvania.
B.S. in M.E., 1905, The George Washington University.

Bachelor of Arts.

Clara Velma Barber, Florida.
Karl Morgan Block, District of Columbia.
Ada Belle Burgdorf, District of Columbia.
August Frederick Wilhelm Edler, Germany.
Frances Elma Gillespie, Texas.
Ethel Hanna McCleary, District of Columbia.
Marion Elizabeth McCoy, North Dakota.
Charlotte Reinke, Texas.
Dorothea Foote Sherman, Virginia.
Louise Jane Smith, West Virginia.
(With distinction)
William Webb Sniffin, District of Columbia.
(With distinction)
Clella Lucile Stevens, Pennsylvania.
Adèle Ria Taylor, New York.
Rhoda Watkins, Pennsylvania.
(With distinction)
Clarence Willard Whitmore, District of Columbia.
Ruth Bell Young, Virginia.

Bachelor of Science.

Howard De Cort Crocker, Virginia.
Katherine Harrington, District of Columbia.
Stephen Elliott Kramer, District of Columbia.
William Henry Lawton, District of Columbia.
Margaret Agnes McMahon, New York.
Elonzo Tell Morgan, West Virginia.
Adon Daniel Phillips, New York.

Bachelor of Science in Chemistry.

Harry Wilson Houghton, Maryland.
Edwin Smith, Jr., Maryland.

Bachelor of Science in Civil Engineering.

Silas Virginius Kemp, Maryland.
Frank Tremain Miller, Michigan.
Arthur Ducat Stivers, Missouri.

Bachelor of Science in Electrical Engineering.

John Hanson Boyden, Virginia.
James Murray Drysdale, Colorado.

Doctor of Medicine.

Julius Leo Arntzen, Missouri.
Samuel Lee Battles, Louisiana.
Robert Anderson Bennett, Maryland.
Nelson Du Val Brecht, District of Columbia.
Ernest William Brown, Connecticut.
Ph.B., 1897, Ph.D., 1900, Yale University.
William Barry Burnell, Oregon.
Fontaine Lee Carswell, Georgia.
Lyman Jairus Clements, Mississippi.
John Sullivan Clifford, New Hampshire.
James Daniel Currie, Texas.
Alfred Preston Davis, North Carolina.
M.D., 1894, Kentucky School of Medicine.
Meade Randolph Edmunds, Mississippi.
James Steele Forsythe, Mississippi.
Ralph Montgomery Goss, Georgia.
A.B., 1901, University of Georgia.
James Robertson Gow, Ohio.
LL.B., 1894, Georgetown University.
Charles Shober Grayson, North Carolina.
Kosciusko Hamilton, Tennessee.
William Slaughter Hardesty, West Virginia.
Roy Cleveland Heflebower, District of Columbia.
Paul Stanley Hill, Maine.
B.A., 1901, Bowdoin College.
Robert Arthur Hooe, Virginia.
Levi Houston Huber, Pennsylvania.
John William Humphries, Virginia.
H. Christian Jorgenson, New York.
Ph.G., 1898, New York College of Pharmacy.
Lyman Frederic Kebler, Pennsylvania.
M.S., 1892, University of Michigan.
Anthony Joseph Lanza, New York.

John Royer Laughlin, Pennsylvania.
M.A., 1902, Columbian University.
Herbert Z. Lund, Utah.
Larry Benjamin McAfee, Indiana.
William Nelson Mebane, North Carolina.
Carroll Sewall Middleton, Maryland.
Herbert Bridger Montgomery, Ohio.
Mead Moore, Kentucky.
Lester Hughes Murdoch, Texas.
Hugh Nutting, New York.
Arthur F. Reeves, North Carolina.
Fred Repetti, District of Columbia.
Phar.D., 1901, National College of Pharmacy.
William Lloyd Sheep, North Carolina.
Charles Augustus Simpson, Virginia.
Stephen Harrison Smith, Virginia.
William Hamilton Smith, Jr., District of Columbia.
Richard Lee Spire, New York.
Arthur Camp Stanley, Wisconsin.
Charles Fague Sterne, District of Columbia.
Earle Clement Stevenson, Nebraska.
B.S., 1899, Nebraska Wesleyan University.
M.A., 1903, University of Nebraska.
Dallas Gilchrist Sutton, District of Columbia.
Arthur Newman Tasker, District of Columbia.
A.B., 1902, Wesleyan University.
Joseph Peterfield Trent, Virginia.
Carl Warren Woods, Vermont.

Doctor of Dental Surgery.

Adolphus Blair Ake, Pennsylvania.
Roy Clay Brittin, Tennessee.
Nathaniel Chapman, District of Columbia.
Ralph Stuart Clinton, New York.
Marion Edwyn Harrison, Georgia.
Upton S. Howser, Maryland.
Don Francis Murphy, District of Columbia.
Frank Elton Neely, Indiana.
James Thomas Prendergast, West Virginia.
John Winslow Taylor, Maryland.
Ralph Ivey Vandewall, Wisconsin.
William Henry Woodruff, New York.

Doctor of Pharmacy.

Louis V. Dieter, Maryland.
Alice Winans Downey, Ohio.
Isadora Geoghegan, District of Columbia.
John W. Grady, South Carolina.
Bernard S. Judd, District of Columbia.
Frank T. Linton, Maryland.
Harry S. McAuley, District of Columbia.
Robert R. Miskimon, Delaware.
Cyrus W. Nelson, Iowa.
Nellie G. O'Donnell, District of Columbia.
Helen A. Sudler, Illinois.

Doctor of Civil Law.

John William Farley, Tennessee.
LL.B., 1902, Vanderbilt University.
LL.M., 1903, M.Dip., 1904, Columbian University.

Albert Cornelius Gaw, Missouri.
B.A., 1894, M.A., 1901, William Jewell College.
M.A., 1896, Gallaudet College.
M.Dip., 1904, The George Washington University.

Howard Saxton, Nebraska.
LL.B., 1901, University of Nebraska.
LL.M., 1904, Columbian University.
M.Dip., 1905, The George Washington University.

Master of Diplomacy.

Clarence Alfonso Miller, Missouri.
LL.B., 1899, Kansas City School of Law.
LL.M., 1905, The George Washington University.

Master of Laws

Frank Coy Allis, New York.
LL.B., 1903, Cornell University.

James L. Bruff, New Jersey.
LL.B., 1903, University of Virginia.

Walter Clark, North Carolina.
LL.B., 1905, University of North Carolina.

Branner Gilmer, North Carolina.
LL.B., 1905, University of North Carolina.

William Kingsley Williams, Wyoming.
B.A., 1900, Yale University.
LL.B., 1903, University of Nebraska.

Master of Patent Law.

George Lowman Beeler, Illinois.
B.S., 1899, Columbian University.
LL.B., 1902, National University.

Edgar Hamilton Bon Durant, Iowa.
LL.M., 1903, National University.

Walter White Boughton, Ohio.
LL.B., 1905, National University.
B.S., 1902, Case School of Applied Science.

Noah J. Brumbaugh, Missouri.
B.A., 1896, Harvard University.
LL.B., 1904, National University.

John Henry Carnes, New Jersey.
LL.B., 1904, National University.

Durant Church, District of Columbia.
LL.B., 1905, Notre Dame.

Nathan Comstock, Wisconsin.
LL.B., 1900, University of Wisconsin.

Richard John Cook, Arkansas.
LL.B., 1905, National University.

Clair Wesley Fairbank, Minnesota.
B.S., 1904, Columbian College.
LL.B., 1905, National University.

George Alexander Hutchinson, District of Columbia.
LL.B., 1905, The George Washington University.

Wylie Churchill Margeson, Michigan.
B.A., 1897, Harvard University.
LL.B., 1903, University of Minnesota.

Edmund Quincy Moses. Massachusetts.
B.S., 1902, Harvard University.
LL.B., 1905, The George Washington University.

Minott Eugene Porter, Ohio.
C.E., 1898, University of Michigan.

Charles Henry Shaffer, Maryland.
B.S., 1896, St. John's College.
LL.B., 1905, The George Washington University.

William John Sperl, Massachusetts.
LL.B., 1905, The George Washington University.

Adolph Alexander Thomas, Ohio.

Frederick Transom, Pennsylvania.
B.S., 1895, University of Pennsylvania.

Lineas Dott Underwood, District of Columbia.
B.S., 1899, Columbian University.

Arthur Wright, Maryland.
B.A., 1900, Johns Hopkins University.

Bachelor of Laws.

Levi Russell Alden, District of Columbia.
A.B., 1903, A.M., 1904, Columbian University.
Ernest Patterson Armstrong, Iowa.
LL.B., 1902, National University.
Carlos Ashby Badger, Utah.
John Richard Barker, North Carolina.
Harry R. Barton, South Dakota.
Glenarvon Behymer, California.
Adam M. Beeler, Indiana.
Riley Andrew Blessing, West Virginia.
Charles Norman Bouic, Maryland.
Marcus Henry Burnstine, District of Columbia.
Simon Henry Busch, Minnesota.
David Hazen Butz, Pennsylvania.
B.A., 1895, Lafayette College.
Morton Mead Cheney, New Hampshire.
Frederick Francis Clark, District of Columbia.
Arthur Henry Codington, Georgia.
LL.B., 1902, Mercer University.
Charles Buxton Coflin, South Carolina.
Louis Cohen, Wisconsin.
Levi Cooke, New York.
Percy Murtaugh Cox, Maryland.
M.D., 1899, Columbian University.
Lucien Bainbridge Crist, District of Columbia.
Victor George Croissant, Washington.
Arthur Emerson Cross, Washington.
LL.B., 1905, University of Washington.
John Benedict Cunningham, West Virginia.
Berkeley Reynolds Davids, Pennsylvania.
Herbert King Davidson, Jr., Massachusetts.
Arthur Llewellyn Davis, Illinois.
Jasper Marion Dresser, Pennsylvania.
B.S., 1890, Purdue University.
Arthur Ames Fisher, District of Columbia.
Allen Gilbert Flowers, South Carolina.
Frank Frayser, Virginia.
Harvey Ford, West Virginia.
Edwin Winfield Fullam, New Jersey.
Charles Franklin Fuller, New York.
B.S., 1901, The George Washington University.
Walter Louis Furbershaw, New York.
Philip Manly Garnett, New Hampshire.

Horace Reid George, Pennsylvania.
Milo B. Goodall, Wisconsin.
Morris K. Harralson, Georgia.
Elmont Bibb Hazard, District of Columbia.
Lewis Hodges, District of Columbia.
Sumner Webster Hurd, New Jersey.
Willie Parker Jones, Massachusetts.
B.A., 1898, Tufts College.
Walter Edwin Keyes, Oregon.
LL.B., 1905, Oregon University of Law.
Harry Ferdinand Lerch, District of Columbia.
Leroy Aylmer McGee, Wisconsin.
Donald Holman McLean, New Jersey.
Tom Crane McNamee, South Dakota.
John Wilfred Mahon, Ohio.
Herbert Walter Meyers, Maryland.
Alexander Gordon Milhado, District of Columbia.
Donald Cassius Muhleman, District of Columbia.
Charles Wesley Morris, District of Columbia.
Henry Farwell Munn, District of Columbia.
Albert Boyd Neal, Tennessee.
Alvin Leroy Newmyer, District of Columbia.
John Thomas Nixon, New Hampshire.
George W. Parsons, Michigan.
Francis John Phillips, New York.
James Hardy Price, South Carolina.
Richard John Francis Quigley, New York.
Edward Leckey Reed, Ohio.
William Levengood Rhoads, Pennsylvania.
Daniel Judson Richardson, New York.
Ph.B., 1903, Syracuse University.
Charles Francis Riddell, Washington.
A.B., 1901, Leland Stanford University.
Eldon E. Sams, Iowa.
Ph.B., 1897, Nebraska Wesleyan University.
Franklin Oliver Sanders, Pennsylvania.
John Carlisle Sell, District of Columbia.
Leonard G. Shelton, Mississippi.
B.S., 1901, Mississippi Agric. and Mechanical College.
Arthur Charles Shepherd, Wisconsin,
Alva Hamilton Shipper, West Virginia.
James T. Simpson, New Hampshire.
Paul Edwin Sleman, District of Columbia.
Walter Allwood Sommers, New York.
LL.B., 1905, St. Lawrence University.

David Judson Starr, Ohio.
Morris Stern, Wisconsin.
Frank Stetson, District of Columbia.
Edwin Allan Swingle, District of Columbia.
Giles Russell Taggart, New Jersey.
B.S., 1900, Columbian University.
Myron Winfield Tilden, Connecticut.
Therrett Towles, District of Columbia.
Horacio Walker, Chile.
William James Wallis, New Hampshire.
B.A., 1894, Dartmouth College.
A.M., 1899, Columbian University.
Fred William Weitzel, Kentucky.
James Dawson Williams, Maryland.
B.A., 1902, Western Maryland College.
Grover C. Wilmoth, Texas.
Walter Orr Woods, Kansas.
William Herbert Woodwell, New Hampshire.

DEGREES CONFERRED AT FALL CONVOCATION, 1906.

IN COURSE.

Doctor of Medicine.

Charles Alben Harrison, Illinois.

Doctor of Pharmacy.

Milton L. Goldsmith, District of Columbia.
Daniel J. Mattingly, Maryland.

Bachelor of Laws.

Leonard Weer Groomes, Maryland.
Alfred Bryan Leet, District of Columbia.
James Cheetham Smith, Pennsylvania.
Wilson Eardley Wilmot, New York.

Master of Laws.

John Cooke Brooke, Virginia.

DEGREES CONFERRED AT WINTER CONVOCATION, 1907.

HONORARY.

Doctor of Laws.

Oscar Terry Crosby, District of Columbia.

IN COURSE.

Doctor of Philosophy.

Warner W Stockberger, Ohio.
B.S., 1902, Denison University.
Thesis: The Effect of Certain Toxic Solutions on Nuclear and Cell Division in Root Tips of Vicia Faba.

Master of Arts.

August Friedrich Wilhelm Edler, Germany.
B.A., 1906, The George Washington University.
Thesis: The Foreign Policy of Frederick the Great.

Master of Science.

Walter Cox Taber, California.
B.A., 1898, Leland Stanford, Jr., University.
Thesis: The Solubility of Mixed Oxides of Calcium and Copper in Aqueous Solution of Phosphoric Acid.

Bachelor of Arts.

Angus McDonald Crawford, Virginia.

Doctor of Medicine.

Gerald van Casteel, Maryland.
LL.B., 1899, LL.M., 1900, Georgetown University.

Doctor of Pharmacy.

Frederick C. Bennett, England.
Addie P. S. Criswell, District of Columbia.
Bernard B. Larrick, Virginia.
Agnes M. Nordeman, Illinois.
Helen Hazel Nordeman, Illinois.

Bachelor of Laws.

Charles Doty Voorhis, New Jersey.

Master of Diplomacy.

Roscoe J. C. Dorsey, Pennsylvania.
LL.B., 1902, LL.M., 1903, Georgetown University.
Thesis: The Growth of the National Banking System under the Currency Act of March 14, 1900.

Doctors of Philosophy.

During the years 1894 to 1907, inclusive, the University has conferred the degree of Doctor of Philosophy, after examination and the presentation and public defense of a thesis, upon the following persons:

1894.

Edward Farquhar, (Greek)
Thesis: Elements of Unity in the Homeric Poems. (Conservative Review, vol. iii, June-September, 1900.)

Walter Scott Harshman, (Theoretical Astronomy)
M.S., 1892, Columbian University.
Thesis: Investigation of the Motion of the Pericentre of Deimos. (Astronomical Journal, Boston, vol. xiv, pp. 145-148, 1894.)

Professor Frank Hall Knowlton, (Botany)
B.S., 1884, M.S., 1887, Middlebury.
Thesis: The Flora of the Laramie Group and Allied Formations. (Not published.)

Claude Augustus Oscar Rosell, (Chemistry)
M.A., 1881, University of Pennsylvania; LL.B., 1886, Georgetown University.
Thesis: Investigation of the Properties of Ferric Acid. (J. Am. Chem. Soc., vol. xvii, pp. 760-769, 1895.)

1895.

George Wesley Hamner, (History)
B.A., 1882, M.A., Hiawassee College; LL.B., 1885, University of Alabama; LL.M., 1886, Georgetown University.
Thesis: Researches upon the Government of the Creek Indians. (Not published.)

1896.

Edward Clarke Hudson, (Greek)
B.A., 1884, M.A., 1894, Hiawassee College; M.A., 1894, Columbian University.
Thesis: Investigation into the Use of the Genitive Case in Greek. (Not published.)

Rev. James Stephen Lemon, (Psycho-physics)
B.A., 1864; M.A., 1867, Wesleyan University, Middletown, Conn.
Thesis: The Skin Considered as an Organ of Sensation. (Published separately, 1898, 70 pp.)

1897.

Professor Charles Arthur Hollick, (Palæobotany)
Ph.D., 1879, Columbia College.
Thesis: Palæobotany of the Yellow Gravel at Bridgeton, N. J. (Not published.)

John Scott Johnson, (Philosophy)
B.S., 1893; M.A., 1894, Columbian University.
Thesis: The Influence of French Thought on the Formation of the Constitution of the United States. (Not published.)

Timothy William Stanton, (Palæontology)
B.S., 1883; M.S., 1895, University of Colorado.
Thesis: A Comparative Study of the Lower Cretaceous Formation and Faunas of the United States. (Jour. of Geology, pp. 1-49, September-October, 1897.)

1898.

Cabell Whitehead, (Chemistry)
B.M., 1885, Lehigh University; M.S., 1895, Columbian University.
Thesis: A Study of the Tellurides; Their Formation and Chemical Properties. (G. W. U. Bull., 5 [4], 65-68, 1906.)

1900.

Eugene Byrnes, (Physical Chemistry)
B.A., 1884, Michigan University; LL.B., 1887; LL.M., 1888, Columbian University.
Thesis: Experiments on the Direct Conversion of the Energy of Carbon into Electrical Energy. (Not published.)

Rev. Benjamin Alfred Dumm, (Philosophy)
B.A., 1886; M.A., 1889, Western Maryland College.
Thesis: The Concept of Self in the Analysis of Experience. (Not published.)

Professor Charles Russell Ely, (Chemistry)
A.B., 1891; A.M., 1897, Yale College.
Thesis: Investigation of the Phenomenon of Deliquescence and the Capacity of Salts to Attract Water Vapor. (G. W. U. Bull., 5 [4], 69-74, 1906.)

Ernestine Fireman, (Chemistry)
M.S., 1898, Columbian University.
Thesis: The Action of Phosphonium Iodide on Tetra and Penta Chlorides. (Am. Chem. Jour., 30, 116-133, 1903.)

Charles Moore, (American History)
A.B., 1878, Harvard; M.A., 1898, Columbian University.
Thesis: The Northwest under Three Flags. (Published separately by Harper & Bros., New York, 1900, 402 pp.)

1901.

William Hamilton, (American History)
B.A., 1891, Moravian College, Pennsylvania; M.A., 1894, Columbian University.
Thesis: The Expansion of Russia to the Eastward. (Not published.)

Chohei Shirasu, (Economics)
Graduate, 1893, Doshisha University, Japan; A.M., 1899, Yale University.
Thesis: The Development of Commerce in Japan and its Effect on Civilization. (Summary of Commerce and Finance for December, 1901, Bureau of Statistics, U. S. Treasury Department, pages 2227-2315.)

1902.

Rev. Frank Leighton Day, (Anthropology)

B.A., 1891; M.A., 1896, Roanoke College; B.D., 1895, Vanderbilt University.)

Thesis: Did the Semites Pass through a Totem Stage? (Not published.)

Nevil Monroe Hopkins, (Chemistry)

B.S., 1899; M.S., 1900, Columbian University.

Thesis: Some Experiments on Electrolytic Conductivity with Reference to the Ionic Theory. G. W. U. Bull., 3 [3], 91-94, 1904. (Published separately as "Experimental Electrochemistry," by D. Van Nostrand Company, New York, 1905, 284 pp., 131 ill.)

1903.

Edward Allston Hill, (Chemistry)

A.B., 1875; A.M., 1902, Yale University; M.S., 1901, Columbian University.

Thesis: The Constitution of Certain Halogen Oxyacids as inferred from Thermochemical Data. (G. W. U. Bull., 3 [4], 94-103, 1904.)

William Mather Lamson, (Architecture)

B.S., 1897; C.E., 1899, Columbian University.

Thesis: Iron and Steel Domes. (Not published.)

Thomas Malcolm Price, (Biochemistry)

B.S., Maryland Agricultural College; M.S., 1900, Columbian University.

Thesis: The Influence of Varying Strength Solutions of Formaldehyde on some of the Enzymes of Animal Origin. (G. W. U. Bull., 3 [4], 104-108, 1904.)

Harriet Richardson, (Zoölogy)

A.B., 1896; A.M., 1901, Vassar College.

Thesis: Contributions to the Natural History of the Isopoda. (Proc. U. S. Nat. Museum, 27, 1-89, 1904, and Bull. U. S. Fish Com., pp. 47-54, Sept. 17, 1903.)

1904.

William Macon Coleman, (History)

A.B., 1858; A.M., 1892, University of North Carolina.

Thesis: A Refutation of Mommsen's Theory on Cæsar's Agrarian Policy. (Not published.)

Frank Van Vleck, (Mechanical Engineering)

M.E., 1884, Stevens' Institute of Technology.

Thesis: Improvements in Ship Construction. (Not published.)

Andrew Wilson, (American History)

B.S., 1885; B.O., 1886; B.A., 1886; M.A., 1890, Kansas Normal College; LL.B., 1890; LL.M., 1891, Georgetown University; M.L., 1892, D.C.L., 1893, Yale University.

Thesis: Influence of John Marshall on the Political History of the United States. (Not published.)

1905

Ray Smith Bassler, (Paleontology)

B.A., 1902, University of Cincinnati; M.S., 1903, The Columbian University.

Thesis: A Study of the James Types of Ordovician and Silurian Bryozoa. (Not published.)

Hiram Colver McNeil, (Chemistry)
B.S., 1896; M.S., 1899, Denison University.
Thesis: On the Constitution of Certain Natural Silicates. (G. W. U. Bull., 4 [3], 76-79, 1905.)

Henry Albert Pressey, (Hydraulic Engineering)
B.S., 1893, The Columbian University; B.S., 1896, Massachusetts Institute of Technology.
Thesis: Flow of Water in Channels. (Not published.)

Warren Waverley Phelan, (Comparative Jurisprudence)
B.A., 1894; M.A., 1896, Columbia University.
Thesis: An Historical Sketch of the Criminal Law of Louisiana from the Founding of the Colony to the Establishment of the State. (Not published.)

1906.

Cornelius Lott Shear, (Botany)
B.S., 1896; M.S., 1900, University of Nebraska.
Thesis: Cranberry Diseases. (G. W. U. Bull., 5 [4], 75-78, 1906.)

Martin Norris Straughn, (Agricultural Chemistry)
B.S., 1899, Maryland Agricultural College; M.S., 1902, Columbian University.
Thesis: The Chemistry of Different Varieties and Individual Ears of Sweet Corn as affected by Enzymes, Climatic Conditions, and Breeding. (Not published.)

1907.

Warner W Stockberger, (Botany)
B.S., 1902, Denison University.
Thesis: The Effect of Certain Toxic Solutions on Nuclear and Cell Division in Root Tips of Vicia Faba. (Not published.)

ALUMNI ASSOCIATIONS.

THE GENERAL ASSOCIATION.

Officers, 1907.

President.

EDWIN C. BRANDENBURG.

Vice-Presidents.

N. LANDON BURCHELL,
DR. THEODORE N. GILL,
DR. VIRGIL B. JACKSON,
FULTON LEWIS,
WILLIAM A. MEARNS,
JOHN B. SLEMAN, JR.

Secretary.

HOWARD L. HODGKINS,

Treasurer.

JOHN B. LARNER.

Executive Committee.

EDWIN C. BRANDENBURG, Chairman.
HOWARD L. HODGKINS, Secretary.

DR. GEORGE N. ACKER,
DR. JOHN W. BURCH,
N. LANDON BURCHELL,
DR. JOHN W. CHAPPELL,
MYER COHEN,
DR. THEODORE N. GILL,
JOHN W. HOLCOMBE,
DR. A. BARNES HOOE,
DR. VIRGIL B. JACKSON,
JOHN B. LARNER,
FULTON LEWIS,
WILLIAM A. MEARNS,
EDWARD G. PORTNER,
WILLIAM H. SINGLETON,
JOHN B. SLEMAN, JR.,
DR. HENRY C. THOMPSON,
HENRY F. WOODARD.

PUGET SOUND ALUMNI ASSOCIATION.

President.

CHARLES F. MUNDAY.

Vice-President.

WILLIS B. HERR.

Secretary and Treasurer.

WILLIAM E. MCCLURE,
Dexter Horton Bank Building, Seattle, Washington.

COLORADO ALUMNI ASSOCIATION.

President.

LUCIUS M. CUTHBERT.

Vice-President.

HERBERT L. MCNAIR.

Secretary and Treasurer.

CLARENCE A. BRANDENBURG,
501 Equitable Building, Denver, Colorado.

SALT LAKE CITY ALUMNI ASSOCIATION.

President.
Dr. William F. Beer.

Vice-President.
Maurice M. Kaighn.

Secretary.
C. L. Olson.

Treasurer.
J. E. Willey.

NEW YORK ALUMNI ASSOCIATION.

President.
Fritz v. Briesen.

Secretary.
Oliver C. Carpenter.

52 William Street, New York City.

SOUTHERN CALIFORNIA ALUMNI ASSOCIATION.

President.
James R. Rogers.

Secretary.
George Russell Duncan,
328 South Spring Street, Los Angeles, Cal.

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